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ABSTRACT

Pilot projects to achieve sex equity in vocational programs at the community colleges of Hawaii have existed on an individual campus basis since 1977. The plan contained in this document continues the sex equity efforts of the community colleges and provides a new approach--based on systemwide coordination--to reducing sex bias and stereotyping in vocational programs. It seeks to effect a better balance of female and male students in programs that are nontraditional to their sex by integrating the efforts at all seven campuses. After an introduction to the Plan and its objectives in Section 1, Section 2 of this report describes the plan, specifying goals and objectives, and how to achieve them. Section 3 provides the rationale for the plan, i.e., an analysis and assessment of the problem including enrollment data, sex equity barriers, and pilot projects attempted that the plan is intended to address. In the last section, the actual documents and list of references reviewed in the problem assessment are included, along with suggested activities to promote sex equity in the college vocational education programs. Appendixes contain workshops and projects that can be replicated for use in carrying out the sex equity plan. (KC)

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# A PLAN FOR SEX EQUITY
# IN POSTSECONDARY VOCATIONAL PROGRAMS
# STATE OF HAWAII

**Prepared by**
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with the assistance of Marian Lauterbach

**Supported by**
**Office of the State Director for Vocational Education, University of Hawaii**
**and**
**Industrial Relations Center, University of Hawaii at Manoa**

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CE 030 002

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- Campus and Office of the State Director for Vocational Education (OSDVE) resource persons: David Cleveland and Meda Chesney Lind (Honolulu Community College); Janice Nuckols (Windward Community College); Darrilynn Kam (formerly of Kapiolani Community College); and Rae Hanson (OSDVE).

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This project has given us the opportunity for study and reflection on the important issue of sex equity in vocational programs. It is indeed gratifying that the plan developed out of the project has been endorsed for implementation by the community college representatives as well as by the Office of the Chancellor for Community Colleges.

Joyce M. Najita, Director
Industrial Relations Center
University of Hawaii at Manoa
September 1981

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# REPORT SUMMARY

Pilot projects to achieve sex equity in vocational programs have been implemented by community colleges on an individual campus basis since 1977. The present plan continues the sex equity efforts of the community colleges and provides a new approach—based on systemwide coordination—to reducing sex bias and stereotyping in vocational programs. It seeks to effect a better balance of female and male students in programs that are nontraditional to their sex by integrating the efforts at all seven campuses.

Specific goals and objectives are:

*Goal 1.* Overcome sex equity barriers, identified as traditional attitudes and traditional career education, in the vocational programs. Objectives are to: (a) increase awareness of sex equity, and (b) promote affirmative career education.

*Goal 2.* Increase the proportion of nontraditional students* in the vocational programs; within three years after the first recruitment year all programs will include at least 10 percent of the minority sex. (According to *OCR Guidelines Implementation,* 90 percent or more students of one sex in a program is an indicator of potential noncompliance.) Objectives are to gradually increase enrollments of nontraditional students in programs where they constitute fewer than 10 percent of all enrolled students, while at the same time maintaining their enrollments in programs with 10-20 percent nontraditional students. If these objectives are met, the systemwide average will be at least 13 percent in 1984-85; it will approach comparability with the national average.

The plan is implemented by means of a two-tiered organizational structure: a systemwide committee which coordinates with the Office of the State Director for Vocational Education and the Office of the Chancellor for Community Colleges in the management of the sex equity program; and a campus committee on each of the seven campuses. Campus Sex Equity Committees are responsible for seeing that individual campus needs are represented at the systemwide level; i.e., on the System Sex Equity Committee. The systemwide committee provides a forum for information exchange, formulates program policy directions, selects projects on the basis of a competitive RFP process, reviews completed projects, and evaluates the program after three years of implementation.

Sex equity projects, basically funded by the Office of the State Director for Vocational Education, are to be carried out for the purpose of achieving the goals and objectives of this plan. The following strategies and activities are recommended: (a) sex equity awareness-raising; (b) recruitment of nontraditional students; (c) affirmative career education; and (d) maintenance, or retention of enrollment gains.

Evaluations are to be conducted throughout the program: proposals reviews, based on the intended achievement of sex equity objectives; project evaluation, based on the accomplishment of proposed objectives; and program assessment, based on the accomplishment of the goals of this plan.

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*A ***nontraditional student*** is a student of the minority sex who is enrolled in a traditionally male- or female-dominated program. ***Auto Mechanics*** is an example of a male-dominated program.

The last is to be done after three years of implementation—i.e., 1984-85.

The implementation schedule for the first academic year (1981-82) calls for the establishment of campus and system committees, and the review, funding, and initiation of the first round of projects.

This report also provides a rationale for the plan, and other supporting materials. Included in Section III, rationale for the plan, are analysis of enrollment data, discussion of sex equity barriers, and review of pilot projects.

The enrollment analysis shows systemwide as well as individual campus proportions of male and female enrollments in traditionally single-sex dominated programs: 71 percent of these programs have fewer than 10 percent nontraditional students; the average increase in nontraditional enrollment proportions between 1976 and 1979 is 1.4 percent. A comparison of state and national data shows that Hawaii lags far behind the national average in its enrollments of nontraditional students.

Sex equity barriers, which presumably are the cause of low enrollments of nontraditional students, are universal; they exist in vocational programs in Hawaii and in programs throughout the mainland. These barriers are: traditional attitudes and behaviors that reinforce sex bias and stereotyping; and lack of affirmative career education that would encourage students to explore career paths previously inaccessible to them.

Pilot projects to reduce sex bias and stereotyping have been funded by the Office of the State Director for Vocational Education since 1977. Implemented by community college faculty, with few exceptions, these projects did not involve vocational education staff. For the most part, they have not been carefully documented, and their impact is difficult to determine. A need for more careful planning of sex equity projects toward achieving an increase in nontraditional enrollments is indicated.

# I. INTRODUCTION

The plan presented in this report is typical of other plans for institutional programs in that it is a record of an organized body of thought aimed at achieving specific outcomes. In format, the report is arranged in the following manner: Section II describes the plan, specifying goals and objectives, and how to achieve them. Section III provides the rationale for the plan; i.e., an analysis and assessment of the problem that the plan is intended to address. Section IV includes the actual documents and list of references reviewed in the problem assessment. This last section also provides activity-oriented material; more extensive descriptions of project ideas and strategies are available in the sex equity resource file at the Office of the State Director for Vocational Education.

The purpose of the plan is to provide guidelines for a systemwide sex equity program, to be implemented by the community colleges in coordination with the Office of the State Director for Vocational Education (OSDVE) and the Office of the Chancellor for Community Colleges (OCCC) beginning Fall 1981. The sex equity program is a special approach to vocational education, calling for awareness raising on the problem of sex bias and for changes in the male/female ratios currently found in certain job training programs such as building construction technologies, metal working trades, secretarial science, and nursing. Sex equity programs and projects of this type generally derive from the provisions of Title II, 1976 Vocational Education Amendments, P.L. 94-482 (henceforth referred to as Title II). They have been implemented by all states since 1977.

Title II addresses sex discrimination, bias, and stereotyping in vocational education programs. The legislation

> authorize[s] Federal grants to States to assist them...to develop and carry out such programs of vocational education within each State so as *to overcome sex discrimination and sex stereotyping in vocational education programs* (including programs of homemaking), and thereby furnish equal educational opportunities in vocational education to persons of both sexes.... (Sec. 101)
> [emphasis supplied]

In addition, every contract under Subpart III, Program Improvement and Supportive Services, must give priority to exemplary and innovative programs and projects designed to reduce sex stereotyping.

The impetus for this plan derives not only from the mandates of the federal law. The spirit of equity is as much a vital force behind programs to eliminate barriers due to stereotyping in education and employment. In supporting the *principle* of sex equity as well as conforming to the rules and regulations of Title II, the community colleges strengthen their educational objectives and insure that their programs are relevant to community needs.

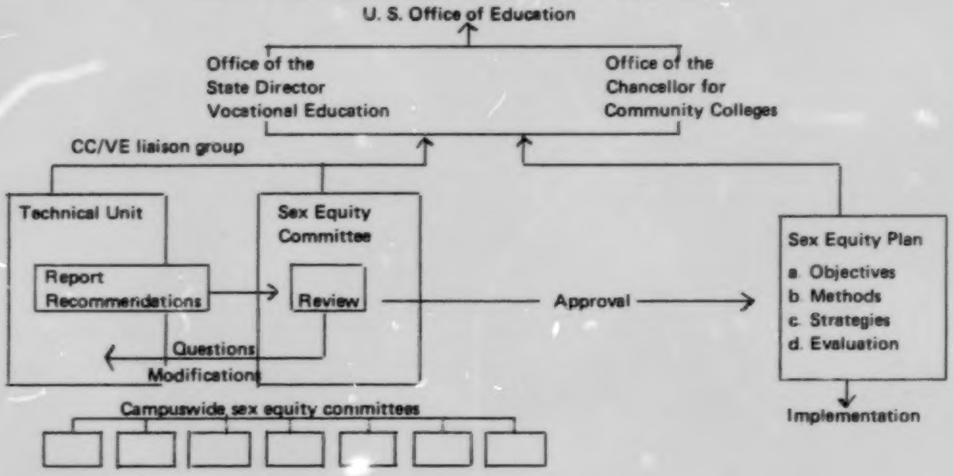
This project can be seen as part of a continuing effort of OSDVE and OCCC to create awareness of sex equity and to achieve a better balance in enrollments of men and women in traditionally male- and [illegible]male-dominated vocational programs. Each year since 1977, OSDVE has allocated funding in the amount of $10,000 (from Subpart II, Basic Grant) to be expended for sex equity efforts at the postsecondary level. Sex equity projects were funded on a competitive basis; i.e., through a request for proposal (RFP) system in which RFPs, issued by OSDVE, were distributed to the campuses by OCCC. Proposals were selected after readings and consultation between the two offices. Types of projects funded included workshops to sensitize faculty to sex-role stereotyping, production of sex-fair brochures on vocational education programs, videotapes, and a resource directory of nontraditional workers. A total of 13 projects received funding between 1977 and 1981 (see Appendix J).

After the four years and the experiences with the 13 projects, it was felt that a novel approach was needed to bear impact on the problem of sex bias and stereotyping in the vocational programs. Nontraditional student[1] enrollments in Hawaii's vocational programs had continued to fall behind national averages; in addition, there had been no communication among the campuses and no sharing of experiences regarding the various projects. There was also no systematic means of avoiding duplication. In its concern to improve the present effort, and to enable future projects to achieve better results, OSDVE issued an RFP in December 1980 for a project that would produce a model for overcoming sex bias that was adaptable by all community college campuses.

In February 1981, the Industrial Relations Center (IRC) was contracted by OSDVE to prepare "a viable plan of action to overcome overt and covert sex bias, stereotyping, and discrimination in postsecondary vocational education programs." This was to be accomplished within the methodology (see below) and time schedule (deadline September 1981) set forth in the IRC proposal.

The plan was developed through the efforts of OCCC, OSDVE, and the seven community college campuses, coordinated by IRC. Representatives of the seven campuses formed the Sex Equity Committee (SEC), which functioned as an advisory committee to the IRC, which served as the technical staff of this project. Members of SEC represented their respective Campus Sex Equity Committees (CSEC), which reviewed technical reports and provided input of vocational program faculty and students. IRC developed recommendations on both direction and detail of the plan; this office also coordinated meetings of the SEC. Representatives of OCCC and OSDVE were ex-officio members of SEC, referred to as the "Community Colleges/Vocational Education Liaison Group" (CC/VE); they provided technical assistance to the project. See Figure 1 below.

Figure 1
Plan Development System: Function and Organization


U. S. Office of Education
Office of the State Director Vocational Education
Office of the Chancellor for Community Colleges
CC/VE liaison group
Technical Unit
Report Recommendations
Sex Equity Committee
Review
Questions
Modifications
Approval
Sex Equity Plan
a. Objectives
b. Methods
c. Strategies
d. Evaluation
Implementation
Campuswide sex equity committees

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[1] *Nontraditional students* are defined here as students who are enrolled in programs which are non traditional to their sex—which are also referred to as "nontraditional programs."

The seven months' work of the project period generally conformed to what was suggested in the proposal. The major activities undertaken by IRC were: literature review; conferring with various resource persons; and the development and distribution of technical reports. The first two activities are reflected throughout this document in such broad matters as the direction and emphasis of the plan, as well as in its specifics and rationale. The technical reports, which were distributed approximately every six weeks, kept the campuses and two administering offices (OSDVE and OCCC) apprised of the developing sex equity plan. These reports, on file at OSDVE, constitute the "working papers" or preliminary drafts of sections of this final report. They are as follows: Introduction and description of the project; and baseline data: analysis and recommendations (Technical Report No. 1); Strategies to overcome campus-internal barriers to sex equity (Technical Report No. 2); untitled report on strategies to overcome external barriers, and recommendations on implementation method (Technical Report No. 3); Report on sex equity plan for vocational education (Technical Report No. 4); and draft of the final report, Sex equity plan for PSVEP and technical support document (Technical Report no. 5). Detailed minutes of the SEC meetings were prepared and these are also on file at OSDVE. These records provide interesting information on campus efforts to achieve sex equity.

All reports were sent to SEC members, OSDVE, OCCC, and other campus resource persons. The fourth report was developed especially for the provosts of community colleges to provide them with an overview of the plan in its final stages of conceptualization. IRC staff met with the provosts on August 31 to discuss the report and to clarify points in question. The draft of the final report (Technical Report No. 5) was sent to deans of instruction and provosts of all campuses, as well as to the individuals and agencies listed above. At the time of writing the final report, IRC received the endorsement and support of the plan as specified in the draft from all concerned parties; there was indication, moreover, that implementation would begin in Fall 1981.

## II. THE PLAN

### Goals and Objectives

The desired outcomes of a program to achieve sex equity are stated in broad terms as goals, and more specifically as objectives. They respond directly to the problem assessment given in Section III, Rationale for the Plan. Judgments as to goals and objectives were influenced by several factors:

- the expressed desire of the Office of the Chancellor for Community Colleges (OCCC) to effect a better balance of male/female enrollments in vocational programs;
- the interest of the Office of the State Director for Vocational Education to improve current efforts in sex equity;
- analysis of enrollment data for academic years 1976 through 1979;
- meetings and interviews with the Sex Equity Committee, the Community Colleges/ Vocational Education Liaison Group, and other campus resource persons;
- review of literatures; and
- review of community college pilot projects, 1977 through Spring, 1981.

Emerging out of the essential mission of the plan—to overcome sex bias, stereotyping and discrimination in postsecondary vocational programs—are the following goals and objectives.

*Goal 1. Overcome Sex Equity Barriers in the Vocational Programs.*

Barriers have been identified as: traditional sex-biased attitudes with regard to "appropriate" sex-role behavior; and traditional career education that perpetuates sex-typing in occupations. Both of these barriers limit career choices for women and men.

*Objective a.* Increase awareness of sex equity[1] among the following segments of the community: students and potential students, community college faculty, unions, employers, and other groups.

*Objective b.* Provide affirmative career education for students and potential students, i.e., *affirmative* in the sense of undoing the effects of traditional sex-biased education.

*Goal 2. Increase the Proportion of Nontraditional Students in the Vocational Programs.*

Within three years after the first recruitment year all programs will include at least 10 percent of the minority sex.[2]

---

[1] Awareness of sex equity is defined as a thorough understanding of:

- how the traditional hierarchical wage-labor market discriminates against the economic interests of women and against the personal development interests of men.
- the costs of sex bias and stereotyping to the individual, the economy, and society.
- the overt and covert behaviors that sanction sex bias and stereotyping.

*Objective a.* Enroll at least two students, during the first enrollment year (1982-83), into programs designated as single-sex in 1979-80, if these programs have fewer than 50 slots. For single-sex programs with 50 or more slots, enroll sufficient numbers of students so that the proportion of nontraditional students is at least 5 percent.

The two-student minimum is suggested for in-class peer support, that is, to avoid situations in which someone is the only male or only female. See Appendix A for individual campus enrollment goals for the first year.

*Objective b.* Increase enrollments by at least three percentage points per year—for other programs with fewer than 10 percent nontraditional students in 1979-80—until the proportion of nontraditional students is no less than 10 percent.

*Objective c.* Maintain those proportions of students—in programs with 10 percent to 20 percent nontraditional students in 1979-80—through replacement of completers/leavers and retention of enrolled students.

If these objectives ar met, there will be significant increases in nontraditional enrollments during the three years following the first recruitment year. No programs will have fewer than 10 percent nontraditional students by 1984-85, even those that were completely single-sex in 1979-80. These projected increases, combined with maintenance of effort for programs over 10 percent in 1979-80, will result in a systemwide average of at least 13 percent nontraditional students in 1984-85.[3]

**Implementation Guidelines**

*Organization for Meeting the Goals and Objectives*

The organizational structure, described below, details the method of program management and implementation. It is essentially a *systemwide approach* adopted for the planning process and recommended for future efforts because of its obvious advantage in that it ensures intra- and inter-campus communication on problems that are common to all campuses. Two levels of committees are involved: on each campus, a Campus Sex Equity Committee (CSEC); and representing all campuses and ETO, a System Sex Equity Committee (SSEC). The SSEC coordinates campus efforts with OSDVE and OCCC, the offices that administer vocational programs.

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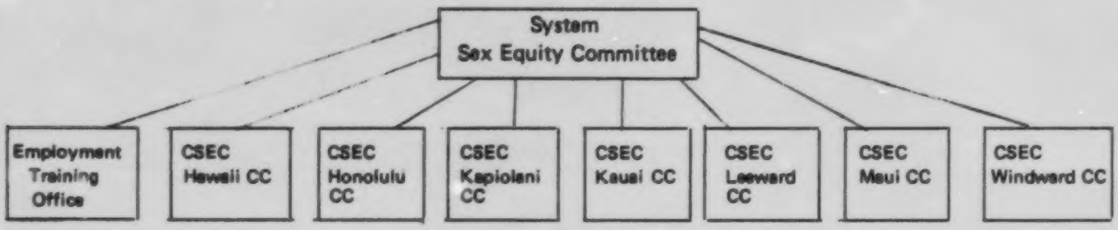
[2] While sex equity is not defined in Title II in terms of a minimum proportion of nontraditional students in a program, *OCR Guidelines Implementation* suggests that a program with 90 percent or more students of one sex is potentially out of compliance. (*OCR* stands for Office of Civil Rights.)

[3] Thirteen percent is the *1978 national average* for nontraditional students.

Figure 2
Program Organization



*Campus Sex Equity Committee (CSEC).* Effective implementation requires the input of vocational education administrators, faculty, and students. Composition of the committee, functions of the chair (designated as the Campus Equity Coordinator (CEC)), and functions of the committee are itemized below. It is suggested that in the interests of providing continuity and the smooth functioning of the sex equity program, the Campus Equity Coordinator serve for at least two years; and, if there is to be a change in the third year, someone who has already served at least one year on the CSEC be the next chair.

*Composition:*
- at least one vocational education instructor, ideally the department chair and/or one other faculty member;
- a vocational education counselor;
- at least one student in a nontraditional program;
- the dean of students, or equivalent;
- the dean of instruction, or equivalent.

*Chair: Functions and Responsibilities:*
- Call meetings of CSEC;
- Circulate sex equity information within the campus;
- Keep apprised of what is happening on campus regarding sex equity;
- Represent the campus on the systemwide committee, SSEC, described below;
- Report to CSEC on SSEC meetings.

*CSEC: Functions and Responsibilities:*
- Serve as clearinghouse for information about campus activities;
- Identify and rank the sex equity needs to be met on campus;
- Select sex equity activities that would be appropriate to meeting campus problems;
- Review and assess completed campus projects;
- Keep a record of meetings and distribute reports to provost;
- Monitor applicant and/or enrollment data each semester, or yearly, as data are available.

*System Sex Equity Committee (SSEC).* This committee, along with representatives of OCCC and OSDVE, form the program management team. Details on committee composition, meetings, functions of the committee, and functions of ex-officio members are given below. The chair of this committee is rotated among the regular members.

*Composition:*

- Regular members: a representative from each of the seven community college campuses (the CEC) and the Employment Training Office (ETO);
- Ex-officio members: Coordinator of Special Services, OSDVE; and representative from OCCC.

*Meetings:* There will be at least two meetings of the SSEC each year, once before proposals are submitted for funding for the fiscal year, and once at the end of the year. Other meetings can be called on a contingency basis. In the first year of this plan, there will be three meetings in the Fall semester, the first an orientation-training session for SSEC members, the second for planning the direction of sex equity activities for the year, and the third to select proposals for funding.

- Arrangements for meeting site and distribution of notices of upcoming meetings and other logistics matters will be handled by OSDVE/OCCC;
- Provosts and CECs will be notified of meetings.

*Meeting Summaries:*

- Responsibility for preparing the summaries of SSEC meetings will be rotated among the colleges;
- OCCC/OSDVE will distribute the summaries;
- CSEC members, the provosts, OSDVE and the Chancellor will receive summaries.

*SSEC: Functions and Responsibilities:*

- Manage the sex equity program with OCCC and OSDVE;
- Serve as clearinghouse for information about activities on all seven campuses;
- Provide forum for the articulation of systemwide problems that are obstacles to increasing sex equity in vocational education, and for discussion of the direction that upcoming sex equity projects should take;
- Select projects to be funded;
- Evaluate sex equity program.

*Ex-officio Members: Functions and Responsibilities:*

- Ensure that the intent of the law is carried out;
- Provide technical assistance, which includes serving as resource persons regarding sex equity information and materials, and handling logistics of SSEC meetings.

### *Program for the First Calendar Year*

Timelines for the first academic year 1981-1982 are suggested; beyond the first year it is expected that the management team will draw up the required implementation schedule.

| *Approximate Date* | *Tasks* |
|---|---|
| September | Provosts appoint members of CSEC and designate the Campus Equity Coordinator.<br>First SSEC meeting: Orient SSEC members (OSDVE) |
| Early Mid-October | First CSEC meetings.<br>(1) Orient CSEC members (CEC).<br>(2) Review past projects on campus—inclusion of persons involved with these |

projects, even though they may not be on the CSEC, is desirable. Assess whether past projects had any impact, whether a similar project should be carried out again but with the past experience to build upon, or whether some other approach to meeting the same objectives would be better.

(3) Assess needs and resources of campus.
  (a) Possible means of needs assessment is to analyze regular program enrollment data in terms of patterns of male and female enrollment in the various vocational education programs. This information, for each campus for the 1979-80 academic year, is provided in Appendix B. Data for subsequent years may be obtained from the campuses or OSDVE.
  (b) Possible means of assessing resources is to inventory the resources on campus which can be called upon to aid in any sex equity project, e.g., faculty and staff with relevant expertise; students enrolled in nontraditional programs who would be willing to be speakers, serve as outreach persons; and, written, sound and visual aid materials relating to sex equity.
(4) Rank problems or campus needs.
(5) Choose activities that will get at the problem or need—to be done for each one perceived; hence there will be a list of problems or needs, each one accompanied by a group of activities that can be implemented to address it. This is the list that the CEC will take to the meeting of the SSEC. When choosing activities it may be helpful to bear the following in mind:
  (a) Appropriateness of activities with respect to the problem of need;
  (b) Resources available on campus and any lack of necessary resources, for particular activities;
  (c) The population that needs to be targeted; i.e., whether it is high school students, reentry adults, community college students, etc.

**Late October**

Second SSEC meeting, subsequent to CSEC's first meeting.
(1) Discuss problems with regard to nontraditional enrollments on the campuses;
(2) Decide on direction, focus, and emphasis for sex equity projects during the academic year. Options:
  (a) campus-level projects,
  (b) systemwide projects,
  (c) combination of systemwide and campus projects;
(3) Other:
  (a) history of sex equity projects, and assessment,
  (b) needs of campuses in order of importance,
  (c) activities that would address the needs,
  (d) campus resources which might be shared; e.g., staff and materials.

**Early November**

Distribution of Request for Proposals (RFPs) prepared by OSDVE's Coordinator for Special Services. RFPs are based on SSEC decisions with respect to direction of projects and locus and focus of efforts.
CSEC meeting:
(1) Report on second SSEC meeting by CEC;
(2) Decide on response to RFP; disseminate RFP to interested parties.

| | |
|---|---|
| Late November/ Early December | Submission of proposals to OSDVE via OCCC. |
| Early December | SSEC meeting for selecting proposals to be funded.<br>(1) Review all proposals according to criteria and a point schedule developed by OSDVE, which will be based on measures itemized in the evaluation section (see pp. 11-12 below).<br>(2) Rank proposals according to total number of points awarded. The number of proposals funded will be in relation to the number which add up to approximately $10,000.<br>(a) In the event that any SSEC member believes that part(s) of a proposed budget of a high-ranking proposal can and/or should be trimmed, this will be resolved by the Committee.<br>(b) In the event that two or more of the high-ranking proposals are of relatively equal merit, it is suggested that funding preference be given the proposal submitted by a college that had not heretofore received proposal funding.<br>(3) Explore other sources of funding and/or other means of implementation for unfunded proposed projects. |
| Late December/ Early January | Final arrangements and awarding of grants. To be jointly conducted by OCCC, OSDVE, and SSEC. |
| March | SSEC meeting to review the working of the system. |
| May | SSEC meeting to review past year and plan for the next. |

## Strategies/Activities

Four categories of implementation actions are suggested for projects to achieve the goals and objectives of the plan: (1) sex equity awareness raising; (2) recruitment; (3) affirmative career education; and (4) maintanance.

### *Sex Equity Awareness Raising*

The community at large needs to realize that sex biases and stereotypes work against the economic and personal interests of students. Raising the general public's level of awareness would create a climate in which students may freely choose a nontraditional career. Specific groups in the community—those who are directly involved with vocational programs—require more extensive consciousness raising efforts. The following activities are recommended as means of achieving Objective a of Goal 1 (increase awareness of sex equity among community groups). They need not be sequentially ordered and may be conducted concurrently.

1. Conduct workshops for students and potential students. Program form/substance may be derived from Appendix C and D.

2. Conduct inservice training workshops for vocational educators. (These can be provided on a systemwide basis through possible reallocation of existing resources such as Subpart III, Personnel Training Funds.) For an example of inservice workshop see Appendix E.

3. Provide informational sessions for union and employer groups. Method of contacting these groups can be found in Appendix F.

4. Implement statewide media campaign. This activity is designed to inform the community at large; see Appendix G.

*Recruitment*

In order to increase the proportion of nontraditional students (Objectives a and b of Goal 2), an active recruitment effort is essential. The first step in the eventual enrollment of students is outreach; i.e., one must find those who are likely candidates. After this is done, these potential students may require counseling or special orientation sessions such as an affirmative career education workshop before they enroll. The following recommended activities are sequentially ordered:

1. Develop lists of potential nontraditional students through:
   - student programs such as career fairs;
   - statewide media campaign;
   - surveys of unemployed and underemployed individuals who are potential reentry students in coordination with Employment Service, CETA, displaced homemakers programs, Continuing Education for Women, and other women's economic self-sufficiency programs;
   - surveys of high school students in coordination with the DOE;
   - surveys of new applicants to the community colleges.

2. Personally contact these individuals to inform them of the opportunities for training in nontraditional fields; for example, form letters with brochures might be sent to them.

3. Facilitate their enrollment in the program by assisting them with the application process if necessary.

4. Provide support for their interest (for students who are not ready to enroll in a nontraditional program) through:
   - individual or group counseling;
   - affirmative career education workshop (see below; this activity is given as a separate category since it has the dual purpose of raising awareness (Goal 1) and increasing enrollments (Goal 2) ).

*Affirmative Career Education*

Traditional career education gives students a sex-biased view of the job market and perpetuates artificial divisions of labor according to sex. An affirmative career education program would inform students about jobs in an unbiased way and encourage them to explore opportunities that were previously closed off to them. The following activities are intended to achieve Objective b of Goal 1 (provide affirmative career education for students and potential students), and Objectives a and b of Goal 2 (increase nontraditional enrollments).

1. Assess sex bias and stereotyping in ongoing career education programs and provide appropriate remedies where bias and stereotyping exist. Remediation steps might include the training of counselors so that they will encourage and support the nontraditional career choices of students, or

the replacement of sex-biased materials with those that are sex-fair or affirmative. Coordination with Career Kokua, DOE, and existing community college programs such as career fairs, counseling and guidance, etc. is recommended.

2. Conduct mini-courses and workshops along the lines of "nontraditional vocational exploration." These would familiarize students with the benefits and requirements of traditionally male- or female-dominated occupational fields; their purpose would be to attract the interest of students in the vocational training programs. Appendix D materials might be used as a resource for mini-courses and workshops.

*Maintenance*

Students already enrolled in nontraditional programs should be given as much support as possible to remain with the program until they are placed. For the most part, dropouts due to sexual harassment or sex-biased teaching will be eliminated if these problems have been taken care of through in-service training (see Sex Equity Awareness Raising above). Special services may be needed, however, such as the following activities which are aimed at achieving Objective c of Goal 2 (maintain proportions of students already enrolled):

1. Provide special counseling for nontraditional students;
2. Establish a peer support group for nontraditional students, if this is needed or desired (see Appendix H).

## Monitoring and Evaluation

The sex equity program described in this plan is an intervention designed to cause desirable changes within the vocational programs toward alleviating larger social problems. On an on-going basis, progress toward this end can be studied by reviewing, monitoring and evaluating enrollment patterns and activities designed to effect changes in these patterns according to the objectives of the plan. A comprehensive assessment should be made after three years of implementation to determine the overall impact of the sex equity program. Three types of review are suggested: proposal, project and program review.

*Proposal Review*

Proposal review is mentioned above (see Implementation Guidelines) as part of the functions of SSEC. Details of this function relate directly to Goals and Objectives and Strategies/Activities. Review criteria are suggested below.

Project objectives should not be substantively different from those of this plan.

Potential students (i.e., unemployed, underemployed, DOE students), community college students, and vocational education faculty are preferred target groups. Other groups such as employers and unions, and parents are not as directly connected to the program themselves, and therefore should be given lower priority.

Direct interventions such as workshops, orientation, and active recruitment efforts are preferred over indirect interventions such as research, curriculum analysis, or audio-visual production unless the latter can be shown to be a critical support component of the former.

Projects should be able to justify themselves according to one or more of the following:

a. An increase in nontraditional enrollments is to be expected within a reasonable period of time;
b. An increase in sex equity awareness is to be expected by the end of the project;
c. An increase in affirmative career education is to be expected within a reasonable period of time.

Objectives should be accomplished as cheaply as possible. Quality being the same, projects serving the greatest number with the smallest budget are to be preferred.

Preference should be given to vocational educators.

### *Project Review*

Projects should be evaluated by SSEC within a year after completion. General criteria should include questions along the following lines:

1. Were the stated objectives achieved; i.e.,
   a. Is there a clear indication that nontraditional students were or will be enrolled?
   b. Is there some evidence that sex equity awareness has been or will have been raised?
   c. Have students been educated in nontraditional career opportunities?

2. How many persons were served?

3. Was the project documented for future reference (final report turned in)?

4. Did the project have any good or bad side effects?

### *Program Review*

Program review is seen as an ongoing process (monitoring) as well as a discrete activity undertaken after three years of implementation (evaluation).

Each semester's enrollment and applicant data should be reviewed beginning Fall 1982. (Data would include enrollments/applicants in traditionally male-female dominated programs according to sex.) Comparisons should be made with data from the preceding semester or year. Each CSEC should review the data of its own campus and report the results to SSEC. No increase in nontraditional applicants/enrollments should trigger closer review of proposals and completed projects.

Also a part of monitoring is periodic reassessment of this plan. Unforeseen changes along the way may require modifications to the present plan.

Since no program termination date has been set, a comprehensive review should be conducted by the SSEC three years after the program is initiated; i.e., Fall 1984. If the objectives of the plan have been achieved by that time, a decision will have to be made as to whether to continue or terminate the program. If nontraditional enrollment increases do not approximate the enrollment goals, a thorough assessment of the program management system by an outside evaluator is recommended.

# III. RATIONALE FOR THE PLAN

## The Community Colleges and Their Enrollments of Nontraditional Students

### *Background*

All but two of the seven community colleges, which today compose the Hawaii state community college system under the jurisdiction of the Board of Regents of the University of Hawaii, originally began as vocational-technical learning institutions. On Oahu, Kapiolani and Honolulu community colleges were first established to provide vocational training in the secretarial sciences and trades, respectively. Maui, Kauai and Hawaii community colleges started as technical schools, to train workers in trades such as automotive mechanics, machinery, carpentery and welding. The gradual transfer of the vocational-technical schools to the state university system from the jurisdiction of the State Department of Education beginning in 1965, resulted in their becoming community colleges with an attendant change in programs offered: the original technical/trades emphasis was expanded to include liberal arts and general education programs.

In 1967 and 1972, two new community colleges were established, Leeward and Windward, respectively. Both are located on Oahu. The program emphasis of these two campuses at their inception was liberal arts, with Windward also having general education and a few business-clerical programs. At Leeward, the programs were intended to allow students to transfer to a four-year college. Later, at these two campuses, programs offered were expanded to include those of vocational education.

In general, then, five of the campuses began as vocational-technical schools with a strong emphasis on employment training programs, and, upon changing to community college status, added liberal arts and general education programs. The remaining two, which began as community colleges with a liberal arts emphasis, later expanded into vocational programs. Hence, there is a preponderance of technical-vocational programs on the first five campuses—with a concentration of programs that have been traditionally male-dominated at Honolulu, and those that have been female-dominated at Kapiolani.

Currently, to meet the needs of their communities and/or of Hawaii generally, the community colleges are offering more comprehensive programs and courses in occupational areas. Some of these community needs are (1) employers who are seeking women in the trades; (2) job upgrading; (3) apprenticeship programs; (4) preparation for employment of the developmentally disabled; and (5) employment training of educationally noninvolved adults.

Recently, the community colleges have been called upon to increase their enrollments of male and female students in programs that have heretofore been dominated by members of the opposite sex—i.e., to increase their nontraditional student enrollments. This is due to the following reasons: (1) federal regulations and policies in the educational sphere—mandated by Title IX and Title II—calling for equal educational opportunity for men and women in education generally, and vocational education in particular; and (2) federal regulations and policies in the employment sphere—mandated by Title VII, Executive Order 11246 and "Order No. 4," requiring federal contractors to eschew discrimination and implement affirmative action programs in their hiring and promotion practices—leading contractors to seek nontraditional workers, especially those in the trade and industrial occupations. In their recruitment efforts several campuses have approached high school students and community college enrollees with the message of nontraditional career opportunities.

### *Enrollment Data Analysis*

Nontraditional student enrollments in vocational education programs is one measure among several kinds of baseline information that can be collected to monitor an institution's progress toward sex equity. (Baseline data are data collected at one point in time against which data, on the same variables, collected at another point in time can be measured.) Other kinds of baseline information that reflect the state of sex equity in a given institution include: (1) headcounts and completions by sex; (2) number of male- or female-dominated programs; (3) program budget apportioned by sex of students; (4) cost per headcount by sex; (5) student/staff ratios by program; (6) follow-up data on students: completions, placements, salaries/wages; (7) average length of programs for "Male" and "female" programs; and (8) average salary and years of service by sex for faculty, staff and administrators. Because the recent efforts of the community colleges have been toward increasing nontraditional enrollments, and because program enrollment data are readily available and are among the most commonly used measures of sex equity, we will analyze these data in order to assess the state of sex equity in Hawaii's community college system. Data will be studied at both the systemwide and the individual campus level.

In the following discussion, the terms "nontraditional," "mixed" and "traditional" should be understood as technically defined. These are:

(a) *a nontraditional program* is one in which women or men students comprised 0.0 to 25.0 percent of students enrolled in that program;
(b) *a mixed program* is one in which women or men students comprised 25.1 to 75.0 percent of students enrolled; and,
(c) *a traditional program* is one in which men or women students comprised 75.1 to 100.0 percent of students enrolled.[1]

In other words, a program classified as traditional for women would be nontraditional for men and vice versa. "Nontraditional students" then are students enrolled in what have been classified as "nontraditional programs." (See Appendix I for program subcategories.) Data are for regular credit programs only.

#### *Systemwide Characteristics, 1976 and 1979*

At the system level, the following analyses were made:[2]

1. A comparison of 1976 and 1979 total male and female enrollments.

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[1] National Advisory Council on Vocational Education (NACVE) and National Advisory Council on Women's Educational Programs (NACWEP), Joint Task Force on Sex Equity, *Increasing Sex Equity; the Impast of the 1976 Vocational Education Amendments on Sex Equity in Vocational Education* (Washington: Govt. Print. Off., 1980), p. 20, fn. 3.

[2] Data were obtained from OSDVE, "Vocational Education Program Enrollment by Sex: University of Hawaii Community Colleges, 1976-1980," 1981 (xerox). This source gives total enrollments, numbers and proportions of female students in all vocational programs offered by the community colleges during the academic years 1976-77 through 1979-80. Systemwide aggregates as well as separate campus enrollments are reported. (See Appendix B.)

2. A comparison of 1976 and 1979 data on the women enrolled in nontraditional, mixed and traditional program categories as a proportion of all female vocational students, and males enrolled in the three program categories as a proportion of all male vocational students.
3. A listing of programs that were single-sex dominated or mixed, 1979.
4. A comparison of 1976 and 1979 female enrollments in nontraditional, mixed, and traditional program categories, as a proportion of students enrolled in these programs.

Changes in Overall Vocational Enrollments. Table 1 on 1976 and 1979 total enrollment data shows the following:

1. Total regular program enrollments increased by 1.2 percent, from 11,483 to 11,620.
2. The proportion of female enrollments increased by 9 percent; male enrollments decreased by 4 percent.

Table 1
Overall Vocational Enrollments at Hawaii's
Seven Community Colleges, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | No. | % | No. | % |
| Male | 6,768 | 58.9 | 6,479 | 55.8 |
| Female | 4,715 | 41.1 | 5,141 | 44.2 |
| Total | 11,483 | 100.0 | 11,620 | 100.0 |

Concentration of Men and Women in Program Categories in Relation to Male and Female Enrollments, respectively. Table 2 shows that of the total male enrollments, the concentration of men students in nontraditional, mixed, and traditional programs remained essentially the same between 1976 and 1979.

Table 2
Number and Percentage of Male Students Relative to Total Male Enrollments,
in Nontraditional, Mixed, and Traditional Programs at Hawaii's
Seven Community Colleges, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | No. | % male | No. | % male |
| Nontraditional | 127 | 1.8 | 103 | 1.6 |
| Mixed | 2,313 | 33.7 | 2,280 | 35.2 |
| Traditional | 4,425 | 64.4 | 4,096 | 63.2 |
| Total | 6,865 | 100.0* | 6,479 | 100.0 |

*Rounded off

Table 3 shows that the concentration of women in traditionally female programs decreased between 1976 and 1979. Increased enrollments occurred in mixed programs during this period and there was also an increase in the enrollment of women in nontraditional programs. While the latter does represent a 116 percent increase, from 144 to 311, the proportion of women vocational education students in nontraditional programs was only 3 percent greater in 1979 than it was in 1976.

Table 3

Number and Percentage of Female Students Relative to Total Female Enrollments in Nontraditional, Mixed, and Traditional Programs at Hawaii's Seven Community Colleges, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | No. | % female | No. | % female |
| Nontraditional | 144 | 3.1 | 311 | 6.0 |
| Mixed | 1,949 | 42.2 | 2,528 | 49.2 |
| Traditional | 2,523 | 54.6 | 2,302 | 44.7 |
| Total | 4,616 | 100.0 | 5,141 | 100.0 |

Sex-Differentiated and Mixed Programs, 1979. Enrollments for the academic year 1979-80, showed that 48 of 65 vocational programs, or 74 percent of such programs, were predominantly single sex. Twenty-nine, or 58 percent, of these had enrollments that were male-dominant, i.e., more than 75 percent of the students enrolled in these programs were men. Almost all of these programs fall into the nationally-determined category of Traditional. The exceptions are (a) *Management* and *Food Service-Culinary Arts,* which are male-dominant in Hawaii, but nationally classified as Mixed, and (b) *Human Services* and *Legal Assisting* which are female-dominant, but are not listed in the national classification. Tables 4 and 5 show the traditional male, and traditional female, programs respectively. In each table the programs have been ranked according to the percentage enrollment of students of the nontraditional gender. Table 6 shows the mixed programs, reported in terms of female enrollments.

Table 4

Percentage of Females in Predominantly Male Programs, UH Community College System, 1979

| Program | % female | Program | % female |
|---|---|---|---|
| Engineering Tech | 0 | Aeronautics Tech. | 5 |
| Sheet Metal & Plastic | 0 | Maintenance Tech. | 6 |
| Welding & Sheet Metal | 0 | Carpentry | 6 |
| Marine Pipefitter | 0 | Drafting & Eng. Aide | 8 |
| Refrig. Tech. | 0 | Applied Trades | 9 |
| Heavy Eqpt. Maint. & Repair | 1 | Industrial Education | 10 |
| Machine Shop Tech. | 1 | Occupational Safety & Health | 11 |
| Fire Science | 1 | Agriculture | 15 |
| Welding Tech. | 2 | Arch. Drafting Tech. | 16 |
| Auto Body | 2 | Marine Tech. | 18 |
| Diesel Mech. | 3 | Drafting Tech. | 20 |
| Auto Mech. Tech. | 3 | Police Science | 20 |
| Electricity | 3 | *Food Service Cul. Art | 23 |
| Industrial Electricity | 3 | *Management | 25 |
| Electronics | 5 | | |

*Classified as a "Mixed" program nationally, but in Hawaii appears as a predominantly male program.

Table 5
Percentage of Males in Predominantly Female Programs,
UH Community College System, 1979

| Program | % male | Program | % male |
|---|---|---|---|
| Secretarial Science | 0 | Medical Assisting | 6 |
| Dietetic Tech. | 0 | Occupational Therapy Asst. | 9 |
| Dental Assisting | 0 | Cosmetology | 10 |
| Apparel Design | 0 | Clerical Bookkeeping | 11 |
| Clerical General | 2 | Practical Nursing | 11 |
| Clerical Steno | 2 | Assoc. Degree Nursing | 12 |
| Fashion Design & Merch. | 3 | *Human Services | 15 |
| Clerical Typist | 4 | *Legal Assisting | 16 |
| General Office Training | 4 | Medical Lab. Tech. | 17 |
| Library Tech. | 4 | | |

*Not listed in the national classification.

Table 6 shows the 17 programs that are classified as "Mixed," i.e., programs that have 25.1 to 75.0 percent men or women students.

Table 6
Percentage of Females in "Mixed" Programs,
UH Community College System, 1979

| Program | % female | Program | % female |
|---|---|---|---|
| Graphic Arts | 33 | Merchandising | 44 |
| Food Service | 33 | Commercial Art | 46 |
| Inf. & Comp. Science | 35 | Resp. Therapy | 48 |
| Commercial Baking | 37 | Data Processing | 49 |
| Food Service Dining Room | 38 | Data Proc. Oper. | 54 |
| Rec. Instructor | 40 | Hotel Oper. | 60 |
| *Social Justice | 40 | Accounting | 70 |
| Business Operations | 40 | Finance | 73 |
| Radiologic Tech. | 40 | | |

*This program was discontinued in 1981.

Female Enrollments as a Percentage of Each of the Program Enrollments. Table 7 indicates an increase in the percentage of women in the Nontraditional category between 1976 and 1979. The increase in the Technical subcategory represents the highest gain of female students. The *Agriculture* category includes a Mixed program, *Ornamental Horticulture,* and because 1976 data for *Agriculture* are not broken down into programs it is not clear whether the gain is from increased female enrollment in the Mixed program or in the other nontraditional ones.

In the Mixed programs, female enrollment percentages increased in *Business* and decreased in *Health;* male enrollments followed reverse patterns.

The proportion of women in Traditional programs remained the same overall, although there was a slight decrease in *Health* programs. Traditional Trades and Industry programs (*Apparel Trades* and *Cosmetology)* showed an increase in women students.

Table 7

Summary Data: Women Enrolled in Nontraditional, Mixed, and Traditional Programs, by Occupational Training Area and Year, Hawaii State Community Colleges, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| NONTRADITIONAL<br>(predominantly male programs) | 144/4569 | 3.2 | 311/4407 | 7.0 |
| Trades and industry | 86/2728 | 3.2 | 159/2881 | 5.5 |
| Agriculture** | 11/130 | 8.5 | 24/155 | 15.5 |
| Technical | 47/1711 | 2.8 | 128/1371 | 9.3 |
| MIXED | 1678/3863 | 43.4 | 2133/4283 | 49.8 |
| Trades and industry | 120/343 | 35.0 | 165/459 | 35.9 |
| Distributive | 140/475 | 29.5 | 189/562 | 33.6 |
| Health | 44/74 | 59.5 | 31/73 | 42.5 |
| Business | 1374/2971 | 46.2 | 1748/3189 | 54.8 |
| TRADITIONAL<br>(predominantly female programs) | 2523/2650 | 95.2 | 2302/2405 | 95.7 |
| Trades and industry | 324/361 | 89.8 | 360/383 | 94.0 |
| Health | 455/489 | 93.0 | 413/462 | 89.4 |
| Business | 1744/1800 | 96.9 | 1529/1560 | 98.0 |
| OTHER*** | 270/401 | 67.3 | 395/525 | 75.2 |

*N = number of all students; n = number of female students.

**The agriculture program includes a nontraditional program, *Agricultural Production*, and a mixed program, *Ornamental Horticulture*. The inclusion of the latter raises the average of nontraditional female enrollments somewhat. Specific program data for the agriculture program are not available for 1976.

***Includes the following programs: *Human Services, Recreation Instructor, Legal Assistant*, and *Social Justice*. These are programs that generally fall within the enrollment parameters of the "Mixed" category of programs, but are not listed in the national enumeration of programs.

### *Campus Characteristics, 1976 and 1979*

Hawaii Community College. In 1976, Hawaii Community College had a total of 1,040 vocational students; this figure was increased by 15 in 1979. Women students accounted for 43.5 percent and 46.2 percent of 1976 and 1979 enrollments, respectively.

A total of 21 vocational programs have been offered since 1976. Of these, 17, or 81 percent, were single-sex dominated in 1979; this is a somewhat higher figure than the systemwide average of 74 percent. Twelve of the 17 programs were predominantly male and 5 predominantly female.

Hawaii Community College's 1976 and 1979 vocational enrollments, classified in terms of predominantly female, predominantly male, and mixed programs, are indicated in Table 8. Since this table reports percentages of female enrollments, predominantly male programs are classified as Nontraditional, and predominantly female programs as Traditional. The Hawaii campus is noteworthy in that it is the only one to have a nontraditional program with a female enrollment greater than 25 percent, viz., *Police Science* in 1979. The 19 percent enrollment of men in the *Associate Degree Nursing* program in the same year is also much higher than the systemwide average of 12 percent. Average gains in nontraditional programs, however, were small: female enrollments increased by .5 percent and male enrollments by 1.3 percent.

Table 8
Women Enrolled in Nontraditional, Mixed, and Traditional Programs,
Hawaii Community College, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| NONTRADITIONAL (predominantly male programs) | 42/521 | 8.1 | 41/474 | 8.6 |
| *Trades and Industry* | 6/277 | 2.2 | 5/272 | 1.8 |
| Automotive Tech: Auto Body Rep. and Maint. | 0/34 | 0 | 1/44 | 2.3 |
| Auto Mechanics Tech. | 0/39 | 0 | 0/45 | 0 |
| Bldg. Const. Tech: | | | | |
| Carpentry | 0/39 | 0 | 0/28 | 0 |
| Electricity | 0/43 | 0 | 1/33 | 3.0 |
| Metal Working Trades: | | | | |
| Machine Shop Tech. | 0/27 | 0 | 0/28 | 0 |
| Weld. and Sheet Metal | 0/31 | 0 | 0/31 | 0 |
| Diesel Machines: Diesel Mech. | 0/33 | 0 | 1/39 | 2.6 |
| Drafting Tech: Draft. & Eng.Aide | 6/31 | 19.4 | 2/24 | 8.3 |
| *Agriculture* | 8/74 | 10.8 | 13/79 | 16.5 |
| Agriculture (2-year) | 8/74 | 10.8 | 13/79 | 16.5 |
| *Technical* | 28/170 | 16.5 | 21/123 | 17.1 |
| Electronics: Electronics Tech. | 0/29 | 0 | 2/31 | 6.5 |
| Fire Science | 0/24 | 0 | 0/17 | 0 |
| Police Science | 28/117 | 23.9 | 21/75 | 28.0 |
| MIXED | 125/228 | 54.8 | 162/287 | 56.4 |
| *Distributive* | 17/49 | 34.7 | 16/47 | 34.0 |
| Hotel/Food Service: Food Service | 17/49 | 34.7 | 16/47 | 34.0 |
| *Business* | 108/179 | 60.3 | 146/240 | 60.8 |
| Accounting & Related: | | | | |
| Accounting (2-year) | 65/93 | 69.9 | 72/95 | 75.8 |
| Data Processing: Data Processing | 17/33 | 51.5 | 15/27 | 55.5 |
| Sales & Management: Merchandising | 26/53 | 49.1 | 59/118 | 50.0 |
| TRADITIONAL (predominantly female programs) | 285/291 | 97.9 | 284/294 | 96.6 |
| *Trades and Industry* | 26/26 | 100.0 | 24/24 | 100.0 |
| Apparel Trades: Apparel Design | 26/26 | 100.0 | 24/24 | 100.0 |
| *Health* | 43/46 | 93.5 | 45/52 | 86.5 |
| Associate Degree Nursing | 21/23 | 91.3 | 26/32 | 81.3 |
| Practical Nursing | 22/23 | 95.7 | 19/20 | 95.0 |
| *Business* | 216/219 | 98.6 | 215/218 | 98.6 |
| Clerical General | 107/110 | 97.3 | 107/110 | 97.3 |
| Secretarial Science | 109/109 | 100.0 | 108/108 | 100.0 |

*N = number of all students; n = number of female students.

Honolulu Community College. Vocational program enrollments at Honolulu Community College grew by 5.1 percent between 1976 and 1979, from 3,540 to 3,720. The number of women students increased from 679 to 947, constituting a 39.5 percent growth. The 23 programs offered in 1976 were augmented by two new ones by 1979: *Clerical Steno* and *Marine Pipefitter.*

In 1979, 23 of 25 programs were single-sex dominant, i.e., 92 percent of all vocational education programs had concentrations of either males or females. Nineteen of the 23 programs had high male enrollments, while the remaining four had high female enrollments. Included in the latter is the *Human Services* program which does not appear in national program enumerations. Two of the 25 vocational programs are Mixed.

Honolulu's program enrollment pattern by gender, revealing that 76 percent of all vocational programs are predominantly male—in other words, Nontraditional for women—reflects the history of the campus which began with programs in which men have traditionally enrolled, in preparation for employment in occupations stereotyped as "male" occupations.

Gains of over 3 percent were made in seven programs, and losses were sustained in three programs. The average gain in predominantly male programs was 6 percent; male enrollments in traditionally female programs decreased by 10.3 percent. One noteworthy program is *Architect Draft. Technology* in which female student enrollments grew from 11 in 1976 to 23 in 1979. Perhaps a case study of this program will suggest how female enrollments in other programs can be increased.

Honolulu Community College's 1976 and 1979 vocational enrollments for programs that have been classified as nontraditional, mixed, and traditional, are shown in Table 9.

Kapiolani Community College. The total number of vocational students at Kapiolani was 2,946 in 1976, and 2,917 in 1979, a decrease of one percent. The proportion of male students increased by 6.2 percent, while that of female students decreased by 4.9 percent.

In 1979, 11 out of 22 programs, or 50 percent of the programs at Kapiolani were sex-differentiated; all were female-concentrated programs. Noteworthy of Kapiolani's vocational programs, in addition to the general absence of male-dominated programs, is that there is a high proportion of Mixed programs. The enrollment pattern by gender reflects the history of the campus, which began with programs in which women have traditionally enrolled.

Kapiolani's 1976 and 1979 vocational enrollments, in terms of predominantly female, and mixed, programs are shown in Tables 10 and 11. As noted above, there are no traditionally male-dominated programs, and thus, no Nontraditional programs. Therefore, to highlight the low male enrollments in the female-dominated programs Table 10, unlike the other tables, reports the percentages of male enrollments. Average gain of males in these programs was 1.2 percent. Table 11 of Mixed program enrollments is consistent with the female percentage reports of the other tables.

## Table 9

### Women Enrolled in Nontraditional, Mixed, and Traditional Programs, Honolulu Community College, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| NONTRADITIONAL | 126/2778 | 4.5 | 137/2686 | 5.1 |
| (predominantly male programs) | | | | |
| *Trade and Industry* | 35/1601 | 2.2 | 82/1659 | 4.9 |
| Applied Trades | 9/317 | 2.8 | 36/403 | 8.9 |
| Automotive Tech.: | | | | |
| Auto Body Rep. and Maint. | 2/175 | 1.1 | 3/119 | 2.5 |
| Auto Mechanics Tech. | 5/313 | 1.6 | 9/265 | 3.4 |
| Bldg. Const. Tech.: Carpentry | 1/81 | 1.2 | 4/88 | 4.5 |
| Ind. Electricity | 0/147 | 0 | 3/94 | 3.2 |
| Diesel Mach.: Heavy Equip.& Repair | 0/72 | 0 | 1/71 | 1.4 |
| Draft. Tech.: Arch. Drft. Tech. | 11/113 | 9.7 | 23/145 | 15.9 |
| Metal Working Trades: | | | | |
| Machine Shop Tech. | 2/61 | 3.3 | 1/122 | 0.8 |
| Sheet Metal and Plast. | 0/69 | 0 | 0/32 | 0 |
| Welding and Sheet Metal | 4/127 | 3.1 | 2/139 | 1.4 |
| Marine Pipefitter** | na | na | 0/42 | 0 |
| Refrig. Tech.: Refrig.& Air Cond. | 1/126 | 0.8 | 0/139 | 0 |
| *Technical* | 91/1177 | 7.7 | 73/1027 | 7.1 |
| Aeronautics Tech.: Aviation Maint. | 1/119 | 0.8 | 6/115 | 5.2 |
| Electronics | 9/288 | 3.1 | 15/332 | 4.5 |
| Engineering Tech. | 5/50 | 10.0 | 0/55 | 0 |
| Fire Science | 0/251 | 0 | 1/182 | 0.5 |
| Industrial Education | 1/139 | 0.7 | 4/42 | 9.5 |
| Occupational Safety & Health | 8/120 | 6.7 | 11/104 | 10.6 |
| Police Science | 67/310 | 21.6 | 36/197 | 18.3 |
| MIXED | 78/209 | 37.3 | 427/644 | 66.3 |
| *Trades and Industry* | 78/209 | 37.3 | 124/282 | 44.0 |
| Commercial Art | 61/156 | 39.1 | 100/218 | 46.9 |
| Hotel/Food Service: Comm. Baking | 17/53 | 32.1 | 24/64 | 37.5 |
| TRADITIONAL | 262/297 | 88.2 | 384/390 | 98.5 |
| (predominantly female programs) | | | | |
| *Trades and Industry* | 262/297 | 88.2 | 314/337 | 93.2 |
| Cosmetology | 158/191 | 82.7 | 176/195 | 90.3 |
| Apparel Trades: Fash. Design & Merch. | 104/106 | 98.1 | 138/142 | 97.2 |
| *Business* | | | 51/53 | 96.2 |
| Secretarial & Related Clerical Steno*** | na | na | 51/53 | 96.2 |
| OTHER | 213/256 | 83.2 | 303/362 | 83.7 |
| Human Services**** | 213/256 | 83.2 | 303/362 | 83.7 |

*N = number of all students; n = number of female students.

**This program was added in 1977.

***This program was added in 1978.

***This program is not listed among the national enumeration of programs. In Hawaii, it is a predominantly female program.

Table 10
Men Enrolled in Nontraditional Programs, Kapiolani Community College, 1976 and 1979*

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N** | % male | n/N | % male |
| NONTRADITIONAL (predominantly female programs) | 40/1134 | 3.5 | 42/891 | 4.7 |
| *Health* | 23/287 | 8.0 | 27/256 | 10.5 |
| Dietetic Tech. | 0/11 | 0 | 0/1 | 0 |
| Dental Assisting | 2/24 | 8.3 | 0/13 | 0 |
| Medical Assisting | 2/47 | 4.3 | 3/36 | 8.3 |
| Medical Lab. Tech. | 7/36 | 19.4 | 2/12 | 16.7 |
| Occup. Therapy Asst. | 1/16 | 6.3 | 3/31 | 9.7 |
| Practical Nursing | 11/153 | 7.2 | 19/163 | 11.7 |
| *Business* | 17/847 | 2.0 | 15/635 | 2.4 |
| Clerical Bookkeeping | 15/107 | 14.0 | 11/103 | 10.7 |
| Clerical General | 2/280 | 0.7 | 3/199 | 1.5 |
| Clerical Stenography | 0/42 | 0 | 1/23 | 4.3 |
| Secretarial Science | 0/418 | 0 | 0/310 | 0 |
| OTHER | 8/82 | 9.8 | 15/91 | 16.5 |
| Public Service: Legal Asst.*** | 8/82 | 9.8 | 15/91 | 16.5 |

*This table, unlike others, reports the percentages of male enrollments.

**N = number of all students; n = number of male students.

***This program is not listed among the national enumeration of programs. In Hawaii, it is a predominantly female program.

Table 11
Women Enrolled in Mixed Programs, Kapiolani Community College, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| MIXED | 766/1730 | 44.3 | 917/1935 | 47.4 |
| *Business* | 611/1249 | 48.9 | 760/1374 | 55.3 |
| Accounting & Related: Acctg. (2-yr) | 207/352 | 58.8 | 253/377 | 67.1 |
| Data Processing: Data Proc. | 97/204 | 47.5 | 125/255 | 49.0 |
| Data Proc. Oper. | 28/48 | 58.3 | 32/60 | 53.3 |
| Sales & Mgmt.: Hotel Oper. | 170/327 | 52.0 | 236/381 | 61.9 |
| Merchandising | 87/277 | 31.4 | 112/296 | 37.8 |
| Business Operations** | 22/41 | 53.7 | 2/5 | 40.0 |
| *Health* | 43/71 | 60.6 | 31/72 | 43.1 |
| Radiologic Tech. | 27/49 | 55.1 | 21/51 | 41.2 |
| Respiratory Therapy | 16/22 | 72.7 | 10/21 | 47.6 |
| *Distributive* | 75/288 | 26.0 | 86/313 | 27.5 |
| Food Service*** | 63/248 | 25.4 | 77/286 | 26.9 |
| Food Service - Din. Rm. | 12/40 | 30.0 | 9/27 | 33.3 |
| *Trade and Industry* | 37/122 | 30.3 | 40/176 | 22.7 |
| Food Service - Cul. Art | 37/122 | 30.3 | 40/176 | 22.7 |

*N = number of all students; n = number of female students.

**This program was discontinued in 1981.

***In 1976 this was known as the "Food Service Management" program.

**Kauai Community College.** Kauai Community College showed a 2.2 percent decrease of total vocational enrollments between 1976 and 1979, from 544 to 532, respectively. The 1976 female enrollment proportion was 44 percent, or 240 students; this grew to 51 percent, or 274 students, in 1979, a 14 percent decrease. Of the 13 programs that were offered in 1976, two, *General Business* and *Architecture Drafting Technology,* were discontinued in 1979. *Drafting Technology* and *Merchandising* were added in 1977 and 1978, respectively.

In 1979, sex-differentiated programs accounted for 92 percent, or 12 of 13, of all vocational programs at Kauai Community College. Of these seven were male-dominant, and five were female-dominant, programs. Among the latter is a program nationally classified as Mixed, viz., *Accounting.* There was one program in the Mixed category, *Merchandising.*

Program enrollments of women in nontraditional, mixed, and traditional categories in 1976 and 1979 at Kauai Community College are given in Table 12. Average enrollments of males in traditionally female programs dropped by 8.8 percent, while the proportion of females in all male-dominated programs decreased by 1.3 percent.

Table 12
Women Enrolled in Nontraditional, Mixed, and Traditional Programs,
Kauai Community College, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| NONTRADITIONAL | 15/277 | 5.4 | 9/222 | 4.1 |
| *Trades and Industry* | 5/205 | 2.4 | 8/176 | 4.5 |
| Automotive Tech: | | | | |
| Auto Body Rep. & Maint. | 0/26 | 0 | 0/32 | 0 |
| Auto Mech. Tech. | 1/61 | 1.6 | 1/70 | 1.4 |
| Bldg. Constr. Tech.: Carpentry | 0/66 | 0 | 5/49 | 10.2 |
| Drafting Tech.: Arch.Draft.Tech.** | 4/23 | 17.4 | na | na |
| Drafting Tech.*** | na | na | 1/8 | 12.5 |
| Metal Working Trades: Welding Tech. | 0/29 | 0 | 1/17 | 5.9 |
| *Technical* | 10/72 | 13.9 | 1/46 | 2.2 |
| Fire Science | 0/18 | 0 | 0/21 | 0 |
| Police Science | 10/54 | 18.5 | 1/25 | 4.0 |
| MIXED | 43/63 | 68.3 | 115/158 | 72.8 |
| *Business* | 43/63 | 68.3 | 115/158 | 72.8 |
| Acctg. & Related: Accounting (2-yr.) | 43/63 | 68.3 | 80/105 | 76.2 |
| Sales & Mgmt.: Merchandising**** | na | na | 35/53 | 66.0 |
| TRADITIONAL | 182/204 | 89.2 | 149/152 | 98.0 |
| *Health* | 43/45 | 95.6 | 19/20 | 95.0 |
| Assoc. Degree Nursing | 12/13 | 92.3 | 14/14 | 100.0 |
| Practical Nursing | 31/32 | 96.9 | 5/6 | 83.3 |
| *Business* | 139/159 | 87.4 | 130/132 | 98.5 |
| Clerical Typist | 63/63 | 100.0 | 73/75 | 97.3 |
| Secretarial Science | 40/40 | 100.0 | 57/57 | 100.0 |
| General Business** | 36/56 | 64.3 | na | na |

*N = number of all students; n = number of female students.

**This program was terminated in 1979.

***This program was added in 1977.

****This program was added in 1978.

Leeward Community College. There was no appreciable difference in total vocational enrollments at Leeward Community College between 1976 and 1979—2,018 and 2,026, respectively. The percentage of female students increased 14 percent, however, from 718 to 816, and women constituted 36 percent and 40 percent,respectively, of total vocational enrollments in 1976 and 1979.

Of the 12 programs offered, 50 percent were sex-differentiated in 1979, with an even division between male- and female-dominant programs. Included among the latter, however, is one program which is classified as Mixed nationally—*Library Technology.* Among the Mixed programs is *Recreation Instructor* which is a program not found in the national program enumerations, and is thus classified as Other in Table 13 below.

Table 13 gives the Leeward Community College enrollments of women students in the vocational programs which have been classified as nontraditional, mixed, and traditional, for 1976 and 1979. On the average, female enrollments in male-dominated programs increased by 3.7 percent, while nontraditional male enrollments decreased by .9 percent. It should be noted that the percentage of women in *Marine Technology*—17 percent—and in *Drafting Technology*—18 percent—in 1979, are relatively high. Also noteworthy is the increase in the number of women enrolled in *Auto Mechanics Technology*—from three in 1976, to 12 in 1979, which represents a 300 percent increase. This is impressive in spite of the rather low 3 percent program enrollment it constituted in 1979. A study of the factors which led to increased female enrollments in the three aforementioned programs may be instructive in recruiting women into other nontraditional programs.

Maui Community College. The number of vocational students at Maui Community College increased by 13.5 percent between 1976 and 1979, i.e., from 842 to 956. Female enrollments increased by 26 percent, and constituted 50 percent of vocational enrollments in 1976, and 55 percent of such enrollments in 1979. Moreover, in 1979, Maui's proportion of women in nontraditional programs—14.7 percent—was twice as high as the systemwide average of 7.0 percent.

Eighteen programs were offered in 1979, one more than in 1976: *Food Service* was added in 1977. Fourteen, or 78 percent, of the programs in 1979 were single-sex dominant in 1979. They were evenly split between male-dominant and female-dominant programs. Table 14 indicates that although *Drafting Technology* is classified as a Nontraditional program, Maui's enrollments would warrant that it be classified a Mixed program. *Human Services,* a program that does not appear in the national program enumerations, is classified in the Other category in Hawaii. Maui's average gain of nontraditional students is the highest of all the campuses. The proportion of nontraditional women students grew by 5.1 percent, while the increase for men was 3.4 percent. The 23 percent proportion of women enrolled in *Police Science* would almost warrant that program be considered in the Mixed category. The numerical increase in the enrollment of women in the latter program suggests that a study of this phenomenon may be helpful in efforts to recruit students into programs that have been nontraditional to their sex. Finally, while *Accounting* is nationally considered a Mixed program, Maui's enrollment is predominantly female.

### Table 13
### Women Enrolled in Nontraditional, Mixed, and Traditional Programs, Leeward Community College, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| NONTRADITIONAL | 24/487 | 4.9 | 47/547 | 8.6 |
| *Trades and Industry* | 17/363 | 4.7 | 29/442 | 6.6 |
| Automotive Tech: Auto Mech. Tech. | 3/263 | 1.1 | 12/347 | 3.5 |
| Drafting Technology | 14/100 | 14.0 | 17/95 | 17.9 |
| *Technical* | 7/124 | 5.6 | 18/105 | 17.1 |
| Marine Tech. | 7/124 | 5.6 | 18/105 | 17.1 |
| MIXED | 385/1140 | 33.8 | 481/1130 | 42.6 |
| *Trades and Industry* | 6/27 | 22.0 | 20/58 | 34.5 |
| Commercial Arts: Graphic Art | 6/27 | 22.2 | 20/58 | 34.5 |
| *Distributive* | 38/113 | 33.6 | 53/140 | 37.9 |
| Hotel/Food Service: Food Service | 38/113 | 33.6 | 53/140 | 37.9 |
| *Business* | 341/1000 | 34.1 | 408/932 | 43.8 |
| Library Technology** | 30/33 | 90.9 | 22/23 | 95.7 |
| Accounting & Related: | | | | |
| Accounting (2-year) | 223/368 | 60.6 | 213/311 | 68.5 |
| Data Processing: Computer Science | 48/192 | 25.0 | 74/211 | 35.1 |
| Sales & Mgmt.: Mgmt. (2-year) | 40/407 | 9.8 | 99/387 | 25.6 |
| TRADITIONAL | 275/282 | 97.5 | 249/253 | 98.4 |
| *Business* | 275/282 | 97.5 | 249/253 | 98.4 |
| Clerical Typist | 71/72 | 98.6 | 57/61 | 93.4 |
| Secretarial Science | 204/210 | 97.1 | 192/192 | 100.0 |
| OTHER | 34/109 | 31.2 | 39/96 | 40.6 |
| Recreation Instructor *** | 34/109 | 31.2 | 39/96 | 40.6 |

*n= number of female students; N = total number of students.

**Classified as a "Mixed" program nationally, but Leeward figures indicate a strong female concentration.

***Not found in the national program enumerations.

Table 14
Women Enrolled in Nontraditional, Mixed, and Traditional Programs,
Maui Community College, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| NONTRADITIONAL<br>(predominantly male programs) | 19/322 | 5.9 | 36/326 | 11.0 |
| *Trades and Industry* | 10/214 | 4.7 | 14/203 | 6.9 |
| Automotive Tech.: | | | | |
| Auto Body Rep. & Paint | 0/28 | 0 | 1/34 | 2.9 |
| Auto Mech. Tech. | 4/74 | 5.4 | 2/69 | 2.9 |
| Bldg. Constr. Tech.: Carpentry | 2/52 | 3.8 | 3/41 | 7.3 |
| Draft. Tech.: Drafting Tech. | 4/25 | 16.0 | 7/24 | 29.2 |
| Maintenance Tech.: Bldg. Maint. | 0/22 | 0 | 1/16 | 6.3 |
| Metal Working Trade: Welding Tech. | 0/13 | 0 | 0/19 | 0 |
| *Agriculture* | 3/51 | 5.9 | 11/75 | 14.7 |
| Agriculture (2-year) | 3/51 | 5.9 | 11/75 | 14.7 |
| *Technical* | 6/57 | 10.5 | 11/48 | 22.9 |
| Police Science | 6/57 | 10.5 | 11/48 | 22.9 |
| MIXED | 113/223 | 50.7 | 182/298 | 61.1 |
| *Distributive* | na | na | 29/52 | 55.8 |
| Hotel Food Service: Food Service** | na | na | 29/52 | 55.8 |
| *Business* | 113/223 | 50.7 | 153/246 | 62.2 |
| Acctg. & Related: Acctg. (2-yr.) | 47/75 | 62.7 | 89/114 | 78.1 |
| Sales & Mgmt.: Hotel Oper. | 56/127 | 44.1 | 50/92 | 54.3 |
| Merchandising | 10/21 | 47.6 | 14/39 | 35.9 |
| TRADITIONAL<br>(predominantly female programs) | 262/269 | 97.4 | 267/284 | 94.0 |
| *Trades and Industry* | 21/21 | 100.0 | 22/22 | 100.0 |
| Apparel Trades: Apparel Design | 21/21 | 100.0 | 22/22 | 100.0 |
| *Health* | 71/73 | 97.3 | 105/119 | 88.2 |
| Assoc. Degree Nursing | 60/62 | 96.8 | 90/102 | 88.2 |
| Practical Nursing | 11/11 | 100 | 15/16 | 93.8 |
| *Business* | 170/175 | 97.1 | 140/144 | 97.2 |
| Gen. Office Training | 103/108 | 95.4 | 94/98 | 95.9 |
| Secretarial Science | 67/67 | 100.0 | 46/46 | 100.0 |
| OTHER | 27/28 | 96.4 | 45/48 | 93.8 |
| Human Services*** | 27/28 | 96.4 | 45/48 | 93.8 |

*N = number of all students; n = number of female students.

**This program was added in 1977.

***This program is not listed among the national enumeration of programs. In Hawaii, it is a predominantly female program.

Windward Community College. Windward, being the newest community college in the State's system, was in a period of program expansion in the vocational area over the time frame being considered. Between 1976 and 1979, vocational enrollment went from 33 to 251. Looking only at college wide percentages, female enrollments decreased from 94 percent to 65 percent. However, it should be pointed out that the expansion of total enrollment was due to the addition of a traditionally male dominated program, *Auto Mechanics Technology,* and two mixed programs, *Accounting* and *Finance.* The traditionally female deominated programs in business experienced a three-fold increase in enrollment and an increase in the percent of women students.

A fourth vocational program, *Social Justice,* was started during the period being considered. It has now been terminated and will not impact future trends in enrollment.

Table 15 shows proportions of women students in programs classified as nontraditional, mixed, and traditional. Between 1976 and 1979 the proportion of men in traditionally female programs (*Business*) decreased by 6.1 percent.

Table 15
Women Enrolled in Nontraditional, Mixed, and Traditional Programs,
Windward Community College, 1976 and 1979

| | 1976 | | 1979 | |
|---|---|---|---|---|
| | n/N* | % female | n/N | % female |
| NONTRADITIONAL (predominantly male programs) | na | na | 0/63 | 0 |
| *Trades and Industry* | | | 0/63 | 0 |
| Auto Mechanics Technology** | na | na | 0/63 | 0 |
| MIXED | na | na | 67/92 | 72.8 |
| *Business* | na | na | 61/77 | 79.2 |
| Acctg. & Related: Acctg. (2-yr.)** | na | na | 50/62 | 80.6 |
| Finance (2-year)** | na | na | 11/15 | 73.3 |
| TRADITIONAL (predominantly female programs) | 31/33 | 93.9 | 96/96 | 100.0 |
| *Business* | 31/33 | 93.9 | 96/96 | 100.0 |
| Clerical Stenography | 27/29 | 93.1 | 47/47 | 100.0 |
| Secretarial Science | 4/4 | 100 | 49/49 | 100.0 |
| OTHER | na | na | 6/15 | 40.0 |
| *Public Service**** | na | na | 6/15 | 40.0 |
| Social Justice | na | na | 6/15 | 40.0 |

*N = number of all students; n = number of female students.

**This program was added in 1977.

***This program is not listed among the national enumeration of programs. At Windward, it was a "Mixed" program. It was begun in 1976 and terminated in 1981.

Tables 16 and 17 below summarize enrollments in nontraditional programs at the seven community colleges that compose the Hawaii system. Programs have been rank ordered according to the degree of systemwide sex differentiation. Almost half of the vocational programs show less than 5 percent enrollment of nontraditional students. The tables show that a traditionally "male" program such as *Police Science* can have a range of female enrollments: Hawaii's 28 percent, Maui's 23 percent, Honolulu's 18 percent and Kauai's 4 percent. This seems to indicate that recruiting women into the *Police Science* program is not a too difficult task. On the other hand, there are programs such as the female-dominated *Secretarial Science* and *Apparel Design,* and the male-dominated *Auto Mechanics, Auto Body Repair and Maintenance,* and *Welding Technology* programs that have one or two or no persons of the minority sex enrolled. This seems to indicate that much greater effort needs to be made (1) to overcome the resistance of men and women to enroll in nontraditional programs, and (2) to encourage counselors, faculty and staff and the community at large to be receptive to the notion of enrolling students in nontraditional programs.

To summarize the findings reported for the individual campuses on the number and kind of sex-differentiated programs, Honolulu and Kauai both have 92 percent of their programs sex-differentiated: at Honolulu, 83 percent, or 19 out of 25, of the programs are male-dominated; at Kauai, 58 percent, or 7 out of 12, are male-dominated. Hawaii, with 81 percent of its programs sex-differentiated, and Maui, with 78 percent, have slightly different patterns in single-sex dominance, i.e., 71 percent, or 12 out of 17, and 50 percent, or 7 out of 14 of the courses at Hawaii and Maui, respectively, have predominantly male enrollments. At Windward, 4 out of 6, or 67 percent of the programs are single-sex dominated, with 75 percent of them being traditionally female programs. Finally, Kapiolani and Leeward both have 50 percent of their vocational programs sex-differentiated, but at Kapiolani all 11 are female-dominated, and at Leeward, 50 percent, or 3 out of 6 are female-dominated. During the three years between 1976-77 and 1979-80, the average increase of nontraditional students in community college vocational programs was 1.4 percent.

*Comparison with the National Average.*

Hawaii does not compare favorably with national averages for enrollments in nontraditional programs in terms of (1) proportional increase of female students in male-dominated programs between 1976 and 1978 (years for which comparable data are available); and, (2) proportion of female and male vocational education students enrolled in male-dominated and female-dominated vocational programs, respectively, in both 1976 and 1978 (with the exception of *Health programs* in 1978). Table 18 shows that the percentage of vocational education women in nontraditional programs in Hawaii to be less than a third of what it was nationally, in 1976 and 1978. Within training areas, Hawaii had less than half the national average in *Trades and Industry* and less than a fourth in *Technical.* Table 19 shows that although the total national average proportion of males in female-dominated programs declined between 1976 and 1978, while Hawaii's increased, still nontraditional male vocational program enrollments in Hawaii lagged far behind national figures, particularly in *Business programs.* The only area in which Hawaii's enrollments showed a proportional increase between 1976 and 1978, and where the percentage enrollment was larger than the national figure is that of *Health programs* in 1978.

## Table 16
## 1979-80 Female Enrollments in Nontraditional Male Dominated Programs: Comparison Between Campuses and Systemwide Average

| | Systemwide | | Campus | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Hawaii | | Honolulu | | Kapiolani | | Kauai | | Leeward | | Maui | | Windward | |
| Nontraditional Program | n/N* | % | n/N | % | n/N | % | n/N | % | n/N | % | n/N | % | n/N | % | n/N | % |
| Police Science | 69/347 | 20 | 21/75 | 28 | 36/19[illegible] | 18 | | | 1/25 | 4 | | | 11/48 | 23 | | |
| Drafting Technology | 26/131** | 20 | | | | | | | 1/8 | 12 | 17/96 | 18 | 7/24 | 29 | | |
| Marine Technology | 19/108** | 18 | | | | | | | | | 18/105 | 17 | | | | |
| Architect Draft. Technology | 23/145 | 16 | | | 23/145 | 16 | | | | | | | | | | |
| Occupational Safety and Health | 11/104 | 11 | | | 11/104 | 11 | | | | | | | | | | |
| Industrial Education | 4/42 | 10 | | | 4/42 | 10 | | | | | | | | | | |
| Applied Trades | 36/403 | 9 | | | 36/403 | 9 | | | | | | | | | | |
| Draft & Eng. Aide | 2/25** | 8 | 2/24 | 8 | | | | | | | | | | | | |
| Carpentry | 12/207 | 6 | 0/26 | 0 | 4/88 | 5 | | | 5/49 | 10 | | | 3/41 | 7 | | |
| Maintenance Technology | 1/16 | 6 | | | | | | | | | | | 1/16 | 6 | | |
| Aeronautics Technology | 6/115 | 5 | | | 6/115 | 5 | | | | | | | | | | |
| Electronics | 17/364 | 5 | 2/31 | 6 | 15/332 | 5 | | | | | | | | | | |
| Auto Mechanic Technology | 25/875** | 3 | 0/45 | 0 | 9/265 | 3 | | | 1/70 | 1 | 12/347 | 3 | 2/69 | 3 | 0/83 | 0 |
| Electricity | 1/33 | 3 | 1/33 | 3 | | | | | | | | | | | | |
| Industrial Electricity | 3/94 | 3 | | | 3/94 | 3 | | | | | | | | | | |
| Diesel Mechanics | 1/39 | 3 | 1/39 | 3 | | | | | | | | | | | | |
| Auto Body Repair & Maintenance | 5/229 | 2 | 1/44 | 2 | 3/119 | 3 | | | 0/32 | 0 | | | 1/34 | 3 | | |
| Welding Technology | 3/75 | 2 | | | 2/139 | 1 | | | 1/17 | 6 | | | 0/19 | 0 | | |
| Fire Science | 1/220 | 1 | 0/17 | 0 | 1/182 | 1 | | | 0/21 | 0 | | | | | | |
| Heavy Equipment and Repair | 1/71 | 1 | | | 1/71 | 1 | | | | | | | | | | |
| Machine Shop Technology | 1/150 | 1 | 0/28 | 0 | 1/122 | 1 | | | | | | | | | | |
| Engineering Technology | 0/55 | 0 | | | 0/55 | 0 | | | | | | | | | | |
| Sheet Metal and Plastic | 0/32 | 0 | | | 0/32 | 0 | | | | | | | | | | |
| Welding and Sheet Metal | 0/31 | 0 | 0/31 | 0 | | | | | | | | | | | | |
| Marine Pipefitter | 0/42 | 0 | | | 0/42 | 0 | | | | | | | | | | |
| Refrig. Technology | 0/139 | 0 | | | 0/139 | 0 | | | | | | | | | | |
| Total | 267/4192** | 6 | 28/395 | 7 | 156/2686 | 5 | | | 9/222 | 4 | 47/547 | 9 | 25/251 | 10 | 0/83 | 0 |

*n = number of nontraditional students; N = total enrollments.

**Totals do not add up. Discrepancies due to incomplete data in original source. See: University of Hawaii, Office of the State Director of Vocational Education, "Vocational Education Program Enrollment by Sex: University of Hawaii Community Colleges, 1976-1980" (Honolulu: 1981).

## Table 17

### 1979-80 Male Enrollments in Nontraditional Female-Dominated Programs: Comparison Between Campuses and Systemwide Average

| Nontraditional Program | Systemwide | | Campus | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Hawaii | | Honolulu | | Kapiolani | | Kauai | | Leeward | | Maui | | Windward | |
| | n/N* | % | n/N | % | n/N | % | n/N | % | n/N | % | n/N | % | n/N | % | n/N | % |
| Medical Lab. Technology | 2/12 | 17 | | | | | 2/12 | 17 | | | | | | | | |
| Legal Assistant | 15/93** | 16 | | | | | 15/91 | 17 | | | | | | | | |
| Human Services | 62/411 | 15 | | | 59/362 | 14 | | | | | | | 3/48 | 6 | | |
| Associate Degree Nursing | 18/152 | 12 | 6/32 | 19 | | | | | 0/14 | 0 | | | 12/102 | 12 | | |
| Clerical Bookkeeping | 12/108** | 11 | | | | | 11/103 | 11 | | | | | | | | |
| Practical Nursing | 23/210** | 11 | 1/20 | 5 | | | 19/163 | 12 | 1/6 | 17 | | | 1/16 | 6 | | |
| Cosmetology | 19/195 | 10 | | | 19/195 | 10 | | | | | | | | | | |
| Occupational Therapy Assistant | 3/32** | 9 | | | | | 3/31 | 10 | | | | | | | | |
| Medical Assisting | 3/42** | 7 | | | | | 3/36 | 8 | | | | | | | | |
| Clerical Typist | 6/139** | 4 | | | | | | | 2/75 | 3 | 4/61 | 7 | | | | |
| General Office Training | 4/98 | 4 | | | | | | | | | | | 4/96 | 4 | | |
| Library Technology | 1/23 | 4 | | | | | | | | | 1/23 | 4 | | | | |
| Fashion Design & Merchandising | 4/142 | 3 | | | 4/142 | 3 | | | | | | | | | | |
| Clerical General | 6/315** | 2 | 3/110 | 3 | | | 3/199 | 2 | | | | | | | | |
| Clerical Stenography | 3/127** | 2 | | | 2/53 | 4 | 1/23 | 4 | | | | | | | 0/47 | 0 |
| Secretarial Science | 0/664 | 0 | 0/108 | 0 | | | 0/310 | 0 | 0/57 | 0 | 0/192 | 0 | 0/46 | 0 | 0/49 | 0 |
| Dietetic Technology | 0/1 | 0 | | | | | 0/1 | 0 | | | | | | | | |
| Dental Assisting | 0/13 | 0 | | | | | 0/13 | 0 | | | | | | | | |
| Apparel Design | 0/46 | 0 | 0/24 | 0 | | | | | | | | | 0/22 | 0 | | |
| Total | 181/2813 | 6 | 10/294 | 3 | 84/752 | 11 | 57/982 | 5 | 3/152 | 1 | 5/276 | 2 | 20/332 | 6 | 0/96 | 0 |

*n = number of nontraditional students; N = total enrollments.

**Totals do not add up. Discrepencies due to incomplete data in original source. See: University of Hawaii, Office of the State Director of Vocational Education, "Vocational Education Program Enrollment by Sex: University of Hawaii Community Colleges, 1976-1980" (Honolulu: 1981).

Table 18
Percentage of Female Vocational Education Students Enrolled in Male-Dominated Programs, by Occupational Training Area, in the United States and Hawaii, 1976 and 1978*

| Training Area | Year<br>1976 | <br>1978 |
|---|---|---|
| *Trades and Industry* | | |
| National | 7.8 | 9.5 |
| Hawaii | 3.2 | 4.2 |
| *Technical* | | |
| National | 12.2 | 16.7 |
| Hawaii | 2.8 | 4.0 |

Table 19
Percentage of Male Vocational Education Students Enrolled in Female-Dominated Programs, by Occupational Training Area, in the United States and Hawaii, 1976 and 1978*

| Training Area | Year<br>1976 | <br>1978 |
|---|---|---|
| *Trades and Industry* | | |
| National | 14.9 | 13.8 |
| Hawaii | 10.0 | 7.2 |
| *Health* | | |
| National | 10.8 | 10.7 |
| Hawaii | 6.9 | 12.7 |
| *Business* | | |
| National | 14.6 | 14.4 |
| Hawaii | 3.1 | 2.0 |

*Sources: University of Hawaii, Office of the State Director of Vocational Education, "Vocational Education Program Enrollment by Sex: University of Hawaii Community Colleges, 1976-1980" (Honolulu: 1981); National Advisory Council on Vocational Education and National Advisory Council on Women's Educational Programs, *Increasing Sex Equity* (Washington: Govt. Print. Off., 1981). National data includes high school enrollments, which actually lowers the average; national community college data alone would show higher proportions of nontraditional students.

## Barriers to Sex Equity

The authors originally proposed to address two types of barriers—those that were internal to community college campuses,[3] and those that were external to the campuses. As the study progressed, however, the barriers that were identified were found to occur both internally and externally. These are traditional behaviors and attitudes in general and traditional career education and guidance.[4] The identification of barriers in this section is by no means a thorough discussion of the problem; the reader is referred to Harrison et al., 1979; Illinois Office of Education, 1978; and U. S. Department of Health, Education, and Welfare, National Institute of Education, 1980.

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[3] There are no overt *institutional* barriers which prevent women and men from enrolling in any of the postsecondary vocational programs. The University of Hawaii has a policy of providing equal educational opportunity to its students, and it is committed to comply with all state and federal statutes which prohibit sex discrimination. Moreover, the community colleges have a policy of open admission—i.e., admission is open to any high school graduate or person 18 years of age or older who can profit from the instruction offered. So far there have been no grievances filed against the institution with regard to sex biased policies or discriminatory practices in postsecondary vocational programs (OSDVE staff, personal communication).

*Traditional Attitudes and Behaviors*

A number of sex-role conventions of the past remain with many of us as behavioral guidelines for present-day life.[5] Some of these are as follows:

1. A woman's primary responsibility is to care for home and children; men are to provide for their families.

2. In the wage-labor market, certain occupations are appropriate for women, and certain other occupations are appropriate for men.

3. Men must never do anything which is not masculine, and women must never do anything which is not feminine.

Remnants of these traditional notions exist in spite of government policies of the past 15 years that stress equal opportunity with special provisions for disadvantaged groups in the interest of society as a whole. Although sex stereotypes are changing, public institutions still perpetuate traditional norms that foster economic and social inequities. Traditional attitudes that involve sex bias and stereotyping are realized as the following behaviors:

—reinforcement of sex stereotyping by educators, including subtle discriminatory treatment of nontraditional students (and potential students) at the classroom and guidance counseling level;

—parental disapproval of a child's nontraditional career choice;

—ridicule by peer group; sexual harassment.

Efforts to overcome this barrier have usually involved educational programs that promote an understanding of the costs of sex stereotyping, such as inservice training, media campaigns, and informational programs.

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[4] These are identified by nearly all reports with any discussion of barriers, for example: U.S. Dept. of Labor, Manpower Administration, *Women in Apprenticeship—Why Not?* (Washington: Govt. Print. Off., 1974); Jane Lerner, Fredell Bergstrom, and Joseph E. Champagne, *EVE: Equal Vocational Education* (Houston: Center for Human Resources, University of Houston, 1976); Illinois Office of Education, Dept. of Adult, Vocational and Technical Education, *Progress Beyond Access* (n.p.: 1978).

[5] Sex-biased attitudes and stereotypical thinking occur among students, faculty, parents and other members of the community. Surveys conducted as part of OSDVE-sponsored pilot projects show biases among high school students, fire science majors, and working firefighters. Meda Chesney Lind and David R. Cleveland, *Pilot Project to Reduce Sex Stereotyping in Vocational Education, Final Report* (Honolulu: Honolulu Community College, 1978); Darrilyn Kam, *Achieving Sex Equity in Vocational Education Programs at Kapiolani Community College* (Honolulu: Kapiolani Community College, 1980).

### *Traditional Career Education*

Since sex biases and stereotypes permeate all aspects of one's life, traditional career education is more a subpart of the general problem of sex-biased attitudes rather than a separate entity. The problem is treated here separately since career education is a deliberate intervention designed to impact directly on students' career choices. The traditionally-raised child approaches his or her career decision with biases that limit the range of occupational choices. These are reinforced, moreover, by career education programs that tend to channel students into sex-typed occupational fields. No matter what his abilities, for example, a boy will never be encouraged—will be discouraged in fact—to pursue a career in nursing or secretarial work. Likewise a girl will be discouraged from taking up a skilled trade such as carpentry.[6]

This barrier is straightforwardly overcome by affirmative career education programs, i.e., those which support student interests in nontraditional programs.[7]

## Approaches to Sex Equity

### *Programs in Other States*

Numerous reports on programs in other states are on file at OSDVE. Most of the reports deal with needs assessments and project activities; these have been reviewed by the technical staff and serve as a basis for our recommendations on program activities.[8]

Since they all follow the mandate of Title II, the goals and objectives of other states' projects are similar—reduction of sex bias and stereotyping through awareness raising and recruitment of nontraditional students. Strategies they suggest to attain these ends are also similar: needs assessment; services for displaced homemakers; workshops for business, community and other groups; inservice training for vocational educators; media campaigns; curriculum review and development; and vocational exploration courses.

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[6] Sex biases are commonly found among counselors and vocational educators: J. K. Dittman, *Sex Role Perceptions of North Dakota Vocational Educators* (Fargo: North Dakota State University, College of Home Economics, 1976); Arthur H. Thomas,and Norman R. Steward, "Counselor Response to Female Clients with Deviate and Conforming Career Goals," *Journal of Counseling Psychology,* July 1971; W. C. Bingham and E. W. House, "Counselors View Women and Work: Accuracy of Information," *Vocational Guidance Quarterly,* June 1973. Reports from SEC members indicate that this is true for postsecondary faculty in Hawaii.

[7] See documents in OSDVE resource file such as: C. B. Stiegler, *How to...Strategies for Sex Equity, "The Role of the Vocational Teacher* (Highland Heights, Ky.: Industrial and Technical Education Dept., Northern Kentucky University, 1980); Washington, Superintendent of Instruction, *Project Awareness* (Olympia: 1976); Deanna Chitayat et al., *Project SEISMIC: Sex Equity in Schools/Modules in Careers* (New York: Institute for Research and Development in Occupational Education, Center for Advanced Study in Education, Graduate School and University Center of the City University of New York, 1981).

[8] Among the program documents we have examined as part of our search for a suitable model, the following were especially helpful: New York City, Board of Education, *A Plan to Reduce Sex Stereotyping in Occupational Education Programs* (New York: n.d.): Illinois, Office of Education, Dept. of Adult, Vocational and Technical Education, *Progress Beyond Access, A Five-Year and Annual State Plan for Sex Equity in Vocational Education in Illinois* (n.p.: 1978); and Rhode Island, Dept. of Education, Bureau of Vocational-Technical Education, *Sex Equity in Vocational Education, Summary of Activities and Programs 1978-1980* (Providence: n.d.).

### *Sex Equity Pilot Projects in Hawaii, 1977-1981*

Pilot projects to achieve sex equity in community colleges vocational programs have been funded by OSDVE since 1977. Between that year and 1981, a total of 13 projects were supported with funds amounting to $34,106. Funds were distributed by means of RFPs originating from OSDVE via OCCC; projects were selected after review by the two offices.

Responses to RFPs came from community college faculty. In most cases, these faculty were liberal arts instructors who were not directly involved in vocational programs. The activities were generally accomplished through assigned time budgeted for the faculty member involved (usually three units per semester), although in some cases projects were carried through on a faculty member's own time.

Projects funded by OSDVE are listed in Appendix J along with their objectives, outcomes, principal investigators, budget, and time frame. Their general goals might be summarized as: (1) to increase awareness toward the reduction of sex bias and stereotyping; and (2) to encourage students to explore nontraditional careers.

#### *Types of Activities.*

A listing of activities below gives some idea of the diverse approaches that projects have taken.

1. Surveys
    a. Child care needs of Kapiolani CC students (Kapiolani CC)
    b. Student attitudes (Kapiolani, Honolulu)
    c. Worker attitudes (Honolulu)

2. Establishment of baseline data (Honolulu)

3. Awareness workshops
    a. For students (Honolulu, Kapiolani, Hawaii)
    b. For faculty (Honolulu, Kapiolani, Windward)
    c. For community (Maui)

4. Audio/Visual production
    a. Videotape: Documentary of workshops (Honolulu); vocational exploration/awareness (Kauai, Maui)
    b. Photographs for display (Kapiolani)
    c. Brochures (Hawaii, Kauai)

5. Directory of nontraditional workers (Kapiolani)

6. Development of campus sex equity plan (Windward)

7. Curriculum analysis (Windward, Honolulu)

Although these activities do not comprise all possible sex equity activities, they are among those that are commonly employed by institutions in other states.

*Evaluation.*

Probably because of budget limitations (project budgets averaged $2,600), no systematic means for evaluating their impact were established. Only one evaluation report[9] is filed at OSDVE.

An informal review of selected projects was made on June 26, 1981 by the Sex Equity Committee.[10] Discussion included the merits, weaknesses, and problems that were apparent during implementation and a completion; a full assessment of the impact was not attempted at this time.

The following evaluative comments are based on:

1. Discussions of projects with SEC members, community college resource persons, and OSDVE staff;
2. "Desk review" of proposals and final reports of OSDVE-funded projects.

Reporting. Unfortunately, not all projects have been documented in written reports. Only seven projects (out of 13) have reports on file at OSDVE. More of these reports, which may be of interest to the implementers of future projects, include some recommendations on how the project could have done better or for further efforts in sex equity.

Impact. Except where this is documented in final reports, it is unclear how many persons were served, or whether the persons served belonged to the appropriate target group.

Whether any impact was made on awareness level or on sex-biased attitudes is impossible to determine in any rigorous fashion. Attitude surveys did not really measure changes in attitude. We expect, however, that there has been some increase in the general awareness of sex equity, and this would be due to OSDVE staff efforts, the dedication of equity-minded project leaders, and the fact that informational sessions were attended.

While the general level of awareness may have increased, there has probably been little change among vocational program staff, since, with the exception of a few individuals, they have not been involved in the planning or implementation of projects. It was noted by community college resource persons that full-time vocational faculty were reluctant to get involved. It was also noted that some projects generated a great deal of enthusiasm among vocational faculty, but that other vocational faculty may have been alienated by too-zealous efforts to raise awareness.

As for project impact on enrollments, this is only ascertainable for projects completed before the enrollment period of 1979-80. The two projects completed before that time resulted in small gains in the enrollment of nontraditional students. The enrollment impact of the remaining projects cannot be fully determined until data are available for 1980-81 or 1981-82.[11]

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[9] Joan Y. Harms. "Pilot Project to Reduce Sex Discrimination in Postsecondary Vocational Education Programs: Evaluation Report" (Honolulu: 1978).

[10] Projects reviewed were: Honolulu Community College Title III program (not OSDVE-funded); Hawaii CC Sex Equity Project, 1981; Maui Community College Breakout Workshop Series, 1978-80; Kauai Community College video-tape project, 1980.

[11] At this writing, 1980-81 data are available.

Other Outcomes. The greatest value of these projects would appear to be the experiences and concrete products that they have generated. Specific products may be used as follows: brochures might be distributed to potential nontraditional students through outreach and orientation programs; photographs might be displayed at workshops or career fairs; the directory of nontraditional workers might be helpful in locating workshop speakers. The accumulated experiences of project staffs may be especially valuable, as these individuals might be consulted in the implementation of related future projects.

### *Existing Mechanisms for Student Orientation and Recruitment.*

The following tables summarize the community colleges' efforts to reach prospective students. The information is based on questionnaire responses which were obtained from all the colleges except Windward.

## Table 20
## Orientation Programs on Campus

| College | Orientation Programs Required | Orientation Programs Voluntary | Organizer | Staffers/Conductors |
|---|---|---|---|---|
| Maui | | x | Student Activities Coordinator-Student Services | Volunteer faculty, counselors |
| Honolulu | x | | Counseling (primary responsibility) with close interaction with admissions and records (Dean of Students heads counseling) | Counselors conduct all orientation sessions |
| Kapiolani | | x | Student Services Center | Counselors for Business Education and Liberal Arts; faculty for Health Education and Food Service Education |
| Hawaii | | x | Office of Student Services and Campus Center Coordinator | UHH Student Services Office; Admissions staff; Counseling and Testing; Student government office |
| Leeward | x | | Student Services | Student Services staff; faculty volunteers |
| Kauai | | x | Student Services Department | Counselors from Student Services Department |

| College | Topic Areas Covered | Length | Students Grouped | Average Size | Average number of Students/Semester |
|---|---|---|---|---|---|
| Maui | Campus tour, foreign students, financial aid, COOP, learning lab, re-entry women, Educational Opportunity Center Services | 3 hours | By choice | 15 - 25 | 200 |
| Honolulu | Overview of postsecondary education; what makes for successful college experience; career exploration; material distribution | 1 hour (separate academic advising sessions by program area) | Date of application | 25/counselor | Fall-2500; Spring-1500 |
| Kapiolani | Program advising; registration; general information | 2 hours | Program area | 111<br>(Business and Liberal Fall 1980-1560 | 14 sessions<br>Arts) |
| Hawaii | Registration; advising; student activities; student services (counseling/testing, housing, etc.); course schedule; packet pick-up | ½ day | By college, i.e., A&S, Ag., HCC | 600 | na |
| Leeward | Courses, programs, in all areas; catalog; schedules; etc. | 2½ hours | Liberal Arts, Voc Tech, undecided, low Nelson-Denny reading scores | 50 - 100 | 2500 |
| Kauai | Academic—study skills and cognitive mapping<br>Nonacademic—financial aid, services of various departments | ½-full day | Program area | 60 - 80 | 600 |

### Table 21
Career Fairs on Campus

| College | Frequency | Length | Organizer | Staffer | Special Population Targeted |
|---|---|---|---|---|---|
| Maui | Once per year | 3 hours | Educational Opportunity Center-Student Services | Same | High school juniors and seniors |
| Honolulu | Once per semester | 2 days | Counselors | Counselors, instructional faculty, students | Population grouped by area of interest |
| Kapiolani | None | | | | |
| Hawaii | Once per year | 1 day | Placement Coordinator and Counselor from EAC | Same | None |
| Leeward | 3 times per semester | 1 day | Career Development Center | Same | Handicapped, nontraditional students |
| Kauai | Once per year | 1 week | Faculty committee | Faculty, Staff | Nontraditional students, mainly presented to high school students |

## Table 22

## School Visits

| College | Schools Visited | Junior/ Elementary | Organizer | Staffer | Length | Ave. no. schools per year |
|---|---|---|---|---|---|---|
| Maui | HSs throughout county at MCC's initiative; private schools | No | Educational Opportunity Center | Counselors-EOC and MCC | Weekly within driving distance; quarterly to Lanai and Hana | 8 |
| Honolulu | Throughout island at HCC initiative, those that request, incl. private schools | Both on request | Counselors | Counseling and instructional faculty | 2 hours-full day | 24-26 |
| Kapiolani | By request | No | Student Services Center | Counselors and faculty | 2 hours | 22 |
| Hawaii | At UHHCC initiative; request; also private schools | Junior HS by request | Admissions Specialist | Office of Student Services, mainly outreach counselor | 1 hour | 55 |
| Leeward | Public and private at LCC initiative and by request | Junior HS by request | Outreach counselor | Same | 2 hours | 12+ |
| Kauai | High schools throughout the island at Kauai CC's initiative | Junior HS by invitation; elem.schools by request | Student Services Dept. | Counselors from Student Services | Up to 1 day | 4 - 5 |

| College | Special Populations Targeted | Type of Student Contact | Program Content |
|---|---|---|---|
| Maui | None | General assembly, classroom, 1-to-1 | Career and education counseling; financial and admissions application assistance |
| Honolulu | Handicapped, nontraditional (on school request); programs mentioned to interest students for follow-up information; minority (LEP-immigrant, foreign) | General assembly, classroom (most frequently used); career fair | Location of campus; program majors; admissions procedures, placement testing, personal attention from faculty; small classes, tuition costs; student services—career assessment, career counseling, personal counseling, academic advising, campus activities |
| Kapiolani | None | Classroom | |
| Hawaii | None | Arranged by counselors and those interested in UHH programs | Description of UHH structure, program offerings, Admission requirements/ procedures, support services for students |
| Leeward | Handicapped, nontraditional,minority from community | Classroom, displays | Visitations off-campus and on-campus |
| Kauai | Handicapped, nontraditional, minority (ethnic, LEP) | General assembly; individual counseling | Academic and nonacademic programs at KCC |

# APPENDIX A

## CAMPUS ENROLLMENT GOALS

The main focus of the recruitment program is to attract students into nontraditional programs. Vocational programs that are traditional to one or the other sex are the general target. It is suggested that target programs be prioritized according to the degree of sex-differentiation that they exhibit. In this case, single-sex programs would have highest priority; other programs with fewer than 10 percent nontraditional students would rank next to these. Since there are a fairly large number of programs below the 10 percent level, it may be advisable to direct the efforts of the plan toward these.*

While numerical goals may be troublesome and intimidating to some individuals, they nevertheless are valuable tools in that they can serve as measures of progress and as evidence of the intention of the community colleges to deal seriously with the fundamental issue of sex-differentiation in vocational programs. Numerical goals would reflect the commitment to make a concentrated effort to change the present enrollment profile.

Goals for each campus's programs for the first recruitment year (1982-83) are given below. Guidelines for developing these goals are the following:

1. For single-sex programs: enroll at least two students (for in-class peer support) in programs with fewer than 50 slots; for programs with 50 or more slots, increase the number of nontraditional students so that the proportion is at least 5 percent.

2. For other programs below 10 percent: nontraditional students should reflect a three percentage point increase per year over the 1979 figure, up to 10 percent.

Table 1
Hawaii Community College Recruitment Goals

| | 1979-80 | | | 1982-83 | |
|---|---|---|---|---|---|
| | Total | No. of | | Recommended Goals | |
| Program | Enrollment | Minority Sex | Percent | Number* | Percent |
| Fire science | 17 | 0 | – | 2 | .12 |
| Auto mech. tech. | 45 | 0 | – | 2 | .06 |
| Carpentry | 28 | 0 | – | 2 | .07 |
| Machine shop tech. | 28 | 0 | – | 2 | .07 |
| Welding and sheet metal | 31 | 0 | – | 2 | .06 |
| Secretarial science | 108 | 0 | – | 5 | .05 |
| Apparel design | 24 | 0 | – | 2 | .08 |
| Auto body repair | 44 | 1 | .02 | 2 | .05 |
| Electricity | 33 | 1 | .03 | 2 | .06 |
| Clerical general | 110 | 3 | .03 | 7 | .06 |
| Diesel mech. | 39 | 1 | .03 | 2 | .06 |
| Practical nursing | 20 | 1 | .05 | 2 | .08 |
| Electronics tech | 31 | 2 | .06 | 3 | .09 |
| Drafting and eng. | 24 | 2 | .08 | 2 | .10 |

*No. of minority sex students to be enrolled.

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*Program enrollment of 90 percent or more of one sex is considered to be an indicator of potential noncompliance (*OCR Guidelines Implementation.* Belmont, Mass.: Education and Human Development, Inc., 1980).

## Table 2
## Honolulu Community College Recruitment Goals

| Program | 1979-80<br>Total Enrollment | <br>No. of Minority Sex | <br>Percent | 1982-83<br>Recommended Goals<br>Number | <br><br>Percent |
|---|---|---|---|---|---|
| Engineering tech. | 55 | 0 | – | 3 | .05 |
| Sheet metal and plastic | 32 | 0 | – | 2 | .06 |
| Marine pipefitter | 42 | 0 | – | 2 | .05 |
| Refrig. and air cond. | 139 | 0 | – | 7 | .05 |
| Fire science | 182 | 1 | .01 | 9 | .05 |
| Heavy equip. and repair | 71 | 1 | .01 | 4 | .05 |
| Marine shop tech. | 122 | 1 | .01 | 6 | .05 |
| Welding and sheet metal | 139 | 2 | .01 | 7 | .05 |
| Fashion design and merch. | 142 | 4 | .03 | 9 | .06 |
| Auto body repair and maint. | 119 | 3 | .03 | 7 | .06 |
| Auto mech. tech. | 265 | 9 | .03 | 16 | .06 |
| Industrial electricity | 94 | 3 | .03 | 6 | .06 |
| Clerical steno | 53 | 2 | .04 | 4 | .07 |
| Carpentry | 88 | 4 | .05 | 7 | .08 |
| Aviation maint. | 115 | 6 | .05 | 9 | .08 |
| Electronics | 332 | 15 | .05 | 27 | .08 |
| Applied trades | 403 | 36 | .09 | 40 | .10 |

## Table 3
## Kapiolani Community College Recruitment Goals

| Program | 1979-80<br>Total Enrollment | <br>No. of Minority Sex | <br>Percent | 1982-83<br>Recommended Goals<br>Number | <br><br>Percent |
|---|---|---|---|---|---|
| Secretarial science | 310 | 0 | – | 15 | .05 |
| Dental assisting | 13 | 0 | – | 2 | .15 |
| Clerical general | 199 | 3 | .02 | 12 | .06 |
| Clerical stenography | 23 | 1 | .04 | 2 | .09 |
| Medical assisting | 36 | 3 | .08 | 4 | .11 |

## Table 4
## Kauai Community College Recruitment Goals

| Program | 1979-80<br>Total Enrollment | <br>No. of Minority Sex | <br>Percent | 1982-83<br>Recommended Goals<br>Number | <br><br>Percent |
|---|---|---|---|---|---|
| Fire science | 21 | 0 | – | 2 | .09 |
| Auto body repair & maint. | 32 | 0 | – | 2 | .06 |
| Secretarial science | 57 | 0 | – | 3 | .05 |
| Assoc. degree nursing | 14 | 0 | – | 2 | .14 |
| Auto mech. tech. | 70 | 1 | .01 | 4 | .05 |
| Clerical typist | 75 | 2 | .03 | 5 | .06 |
| Police science | 25 | 1 | .04 | 2 | .08 |
| Welding tech. | 17 | 1 | .06 | 2 | .12 |

## Table 5
## Leeward Community College Recruitment Goals

| | 1979-80 | | | 1982-83 | |
|---|---|---|---|---|---|
| Program | Total Enrollment | No. of Minority Sex | Percent | Recommended Number | Goals Percent |
| Secretarial science | 192 | 0 | – | 9 | .05 |
| Auto mech. tech. | 347 | 12 | .03 | 21 | .06 |
| Library tech. | 23 | 1 | .04 | 2 | .09 |
| Clerical typist | 61 | 4 | .07 | 6 | .10 |

## Table 6
## Maui Community College Recruitment Goals

| | 1979-80 | | | 1982-83 | |
|---|---|---|---|---|---|
| Program | Total Enrollment | No. of Minority Sex | Percent | Recommended Number | Goals Percent |
| Welding tech. | 19 | 0 | – | 2 | .11 |
| Secretarial science | 46 | 0 | – | 2 | .05 |
| Apparel design | 22 | 0 | – | 2 | .09 |
| Auto body repair and ptg. | 34 | 1 | .03 | 2 | .06 |
| Auto mech. tech. | 69 | 2 | .03 | 4 | .06 |
| General office training | 98 | 4 | .04 | 7 | .07 |
| Maintenance tech. | 16 | 1 | .06 | 2 | .13 |
| Practical nursing | 16 | 1 | .06 | 2 | .13 |
| Human services | 48 | 3 | .06 | 4 | .09 |
| Carpentry | 41 | 3 | .07 | 4 | .10 |

## Table 7
## Windward Community College Recruitment Goals

| | 1979-80 | | | 1982-83 | |
|---|---|---|---|---|---|
| Program | Total Enrollment | No. of Minority Sex | Percent | Recommended Number | Goals Percent |
| Clerical steno | 47 | 0 | – | 2 | .05 |
| Secretarial science | 49 | 0 | – | 3 | .06 |
| Auto mech. tech. | 63 | 0 | – | 3 | .05 |

## APPENDIX B

## VOCATIONAL EDUCATION ENROLLMENT BY SEX IN ALL COMMUNITY COLLEGES

University of Hawaii System
1976 - 1980

| PROGRAM | Academic Year | TOTAL | Male/Female | % Female |
|---|---|---|---|---|
| ENROLLMENT: ALL COLLEGES | 1976-77 | 28,924 | 15,962/12,962 | 45% |
| | 1977-78 | 28,278 | 15,065/13,213 | 47% |
| | 1978-79 | 28,009 | 14,491/13,516 | 48% |
| | 1979-80 | 27,939 | 14,114/13,817 | 49% |
| VOCATIONAL EDUCATION ENROLLMENT | 1976-77 | 11,483 | 6,768/4,715 | 41% |
| | 1977-78 | 11,550 | 6,635/4,915 | 43% |
| | 1978-79 | 11,564 | 6,591/4,973 | 43% |
| | 1979-80 | 11,620 | 6,479/5,141 | 44% |
| BUSINESS | 1976-77 | 2799 | 1563/1236 | 44% |
| | 1977-78 | 2726 | 1438/1288 | 47% |
| | 1978-79 | 2803 | 1338/1465 | 52% |
| | 1979-80 | 3068 | 1422/1646 | 54% |
| SECRETARIAL AND RELATED | 1976-77 | 1842 | 76/1766 | 96% |
| | 1977-78 | 1839 | 83/1756 | 95% |
| | 1978-79 | 1673 | 50/1623 | 97% |
| | 1979-80 | 1565 | 34/1531 | 98% |
| HEALTH SERVICE | 1976-77 | 563 | 64/499 | 89% |
| | 1977-78 | 582 | 85/497 | 85% |
| | 1978-79 | 534 | 95/439 | 82% |
| | 1979-80 | 535 | 91/444 | 83% |
| HOTEL/FOOD SERVICE | 1976-77 | 657 | 461/196 | 30% |
| | 1977-78 | 739 | 528/211 | 29% |
| | 1978-79 | 811 | 565/246 | 30% |
| | 1979-80 | 803 | 549/254 | 32% |
| PUBLIC SERVICE | 1976-77 | 1565 | 1054/511 | 33% |
| | 1977-78 | 1581 | 989/592 | 37% |
| | 1978-79 | 1520 | 942/578 | 38% |
| | 1979-80 | 1354 | 774/580 | 43% |
| TRADES AND TECHNOLOGY | 1976-77 | 4057 | 3550/507 | 12% |
| | 1977-78 | 4083 | 3512/571 | 14% |
| | 1978-79 | 4223 | 3601/622 | 15% |
| | 1979-80 | 4295 | 3609/686 | 16% |

University of Hawaii Community Colleges

1976 - 80

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| *Enrollment: All Colleges | Total<br>Female % | 28,924<br>12,962 45 | 28,278<br>13,213 47 | 28,009<br>13,518 48 | 27,939<br>13,817 49 |
| Vocational Education Program Enrollment | Total<br>Female % | 11,483<br>4,715 41 | 11,550<br>4,915 43 | 11,564<br>4,973 43 | 11,620<br>5,141 44 |
| BUSINESS | Total<br>Female % | 2,799<br>1,236 44 | 2,726<br>1,288 47 | 2,803<br>1,465 52 | 3,068<br>1,646 54 |
| Accounting & Related Accounting (2 yr.) | Total<br>Female % | 1,017<br>622 61 | 1,003<br>637 64 | 1,029<br>719 70 | 1,088<br>766 70 |
| Data Processing: Inform. & Comp. Sci. | Total<br>Female % | 205<br>51 25 | 199<br>65 33 | 184<br>60 33 | 218<br>76 35 |
| Data Processing | Total<br>Female % | 261<br>126 48 | 259<br>123 47 | 247<br>115 47 | 292<br>144 49 |
| Data Proc. Oper. | Total<br>Female % | 51<br>30 59 | 38<br>27 71 | 59<br>38 64 | 61<br>33 54 |
| Finance: Finance (2 yr.) | Total<br>Female % | -<br>- | 5<br>5 100 | 8<br>5 63 | 15<br>11 73 |
| Sales & Management: Mgmt. (2 yr.) | Total<br>Female % | 420<br>42 10 | 375<br>55 15 | 358<br>68 19 | 397<br>101 25 |
| Hotel Oper. | Total<br>Female % | 472<br>231 49 | 433<br>230 53 | 441<br>264 60 | 480<br>288 60 |
| Merch. | Total<br>Female % | 373<br>134 36 | 414<br>146 35 | 477<br>196 41 | 517<br>227 44 |
| SECRETARIAL AND RELATED | Total<br>Female % | 1,842<br>1,766 96 | 1,839<br>1,756 95 | 1,673<br>1,623 97 | 1,565<br>1,531 98 |
| Business Operations | Total<br>Female % | 42<br>22 52 | 52<br>29 56 | 33<br>16 48 | 5<br>2 40 |
| Clerical Bookkeeping | Total<br>Female % | 109<br>94 86 | 102<br>87 85 | 109<br>98 90 | 108<br>96 89 |
| Clerical General | Total<br>Female % | 407<br>400 98 | 427<br>418 98 | 377<br>367 97 | 315<br>309 98 |
| Clerical Stenography | Total<br>Female % | 77<br>75 97 | 80<br>75 94 | 129<br>125 97 | 127<br>124 98 |
| Clerical Typist | Total<br>Female % | 142<br>141 99 | 126<br>125 99 | 121<br>117 97 | 139<br>133 96 |
| General Business | Total<br>Female % | 56<br>36 64 | 61<br>42 69 | 1<br>1 100 | -<br>- |
| General Office Trng. | Total<br>Female % | 109<br>104 95 | 112<br>106 95 | 112<br>110 98 | 98<br>94 96 |
| Secretarial Science | Total<br>Female % | 900<br>894 99 | 879<br>874 99 | 791<br>789 99 | 773<br>773 100 |
| HEALTH SERVICE | Total<br>Female % | 563<br>499 89 | 582<br>497 85 | 534<br>439 82 | 535<br>444 83 |
| Assoc. Degree Nursing | Total<br>Female % | 117<br>112 96 | 102<br>93 91 | 133<br>119 89 | 152<br>134 88 |
| Dietetic Tech. | Total<br>Female % | 11<br>11 100 | 5<br>5 100 | 2<br>2 100 | 1<br>1 100 |
| Dental Assisting | Total<br>Female % | 24<br>22 92 | 26<br>26 100 | 20<br>20 100 | 13<br>13 100 |
| Medical Assisting | Total<br>Female % | 51<br>49 96 | 44<br>44 100 | 34<br>34 100 | 42<br>39 93 |
| Medical Lab Tech. | Total<br>Female % | 38<br>30 79 | 21<br>16 76 | 20<br>14 70 | 12<br>10 83 |
| Occup. Therapy Ass't. | Total<br>Female % | 16<br>15 94 | 28<br>26 93 | 20<br>19 95 | 32<br>29 91 |
| Practical Nursing | Total<br>Female % | 232<br>216 93 | 289<br>251 87 | 252<br>212 84 | 210<br>187 89 |
| Radiologic Tech. | Total<br>Female % | 50<br>27 54 | 52<br>25 48 | 51<br>17 33 | 52<br>21 40 |
| Respiratory Therapy | Total<br>Female % | 24<br>17 71 | 15<br>11 73 | 2<br>2 100 | 21<br>10 48 |

All Colleges (cont'd.)

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| HOTEL/FOOD SERVICE | Total<br>Female % | 657<br>196 30 | 739<br>211 29 | 811<br>246 30 | 803<br>254 32 |
| Commercial Baking | Total<br>Female % | 53<br>17 32 | 62<br>15 24 | 71<br>20 28 | 64<br>24 37 |
| Food Service | Total<br>Female % | 118<br>42 36 | 201<br>67 33 | 540<br>177 33 | 533<br>178 33 |
| Food Serv. Cul. Art | Total<br>Female % | 129<br>39 30 | 171<br>38 22 | 165<br>35 21 | 177<br>41 23 |
| Food Serv. Dining Room | Total<br>Female % | 40<br>12 30 | 36<br>16 44 | 26<br>11 42 | 29<br>11 38 |
| Food Serv. Mgmt. | Total<br>Female % | 317<br>86 27 | 269<br>75 28 | 9<br>3 33 | -<br>- |
| PUBLIC SERVICE | Total<br>Female % | 1,565<br>511 33 | 1,581<br>592 37 | 1,520<br>578 38 | 1,354<br>580 43 |
| Fire Science | Total<br>Female % | 295<br>0 0 | 275<br>0 0 | 277<br>1 1 | 220<br>1 1 |
| Human Services | Total<br>Female % | 266<br>221 83 | 369<br>316 86 | 393<br>326 83 | 411<br>349 85 |
| Industrial Education | Total<br>Female % | 54<br>1 2 | 51<br>1 2 | 44<br>2 5 | 42<br>4 10 |
| Legal Assistant | Total<br>Female % | 95<br>85 89 | 104<br>88 85 | 100<br>85 85 | 93<br>78 84 |
| Library Technology | Total<br>Female % | 35<br>31 89 | 36<br>33 92 | 36<br>33 92 | 23<br>22 96 |
| Occup. Safety & Health | Total<br>Female % | 126<br>8 6 | 125<br>8 6 | 128<br>10 8 | 104<br>11 11 |
| Police Science | Total<br>Female % | 559<br>115 21 | 514<br>107 21 | 435<br>82 19 | 347<br>69 20 |
| Rec. Instructor | Total<br>Female % | 120<br>36 30 | 107<br>39 36 | 103<br>36 35 | 99<br>40 40 |
| Social Justice | Total<br>Female % | 15<br>14 93 | -<br>- | 4<br>3 75 | 15<br>6 40 |
| TRADES AND TECHNOLOGY | Total<br>Female % | 4,057<br>507 12 | 4,083<br>571 14 | 4,223<br>622 15 | 4,295<br>686 16 |
| Applied Trades | Total<br>Female % | 329<br>10 3 | 352<br>8 2 | 385<br>17 4 | 403<br>36 9 |
| Aeronautics Tech. | Total<br>Female % | 125<br>1 1 | 78<br>0 0 | 102<br>4 4 | 115<br>6 5 |
| Agriculture:<br>Agriculture (2 yr.) | Total<br>Female % | 130<br>11 8 | 146<br>23 16 | 165<br>20 12 | 155<br>24 15 |
| Apparel Trades:<br>Apparel Design | Total<br>Female % | 54<br>53 98 | 57<br>56 98 | 59<br>57 97 | 46<br>46 100 |
| Fashion Design & Merch. | Total<br>Female % | 114<br>111 97 | 114<br>110 96 | 132<br>127 96 | 142<br>138 97 |
| Commercial Arts:<br>Commercial Art | Total<br>Female % | 161<br>64 40 | 181<br>80 44 | 214<br>94 44 | 218<br>100 46 |
| Graphic Art | Total<br>Female % | 32<br>7 22 | 44<br>8 19 | 63<br>18 29 | 60<br>20 33 |
| Automotive Tech:<br>Auto Body Rep. & Paint | Total<br>Female % | 266<br>2 1 | 213<br>3 1 | 218<br>4 2 | 229<br>5 2 |
| Auto Mech. Tech. | Total<br>Female % | 768<br>14 2 | 835<br>12 1 | 775<br>15 2 | 875<br>25 3 |
| Building Const. Tech:<br>Carpentry | Total<br>Female % | 241<br>4 2 | 216<br>5 2 | 226<br>8 4 | 207<br>12 6 |
| Electricity | Total<br>Female % | 44<br>0 0 | 36<br>0 0 | 34<br>0 0 | 33<br>1 3 |
| Indust. Electricity | Total<br>Female % | 152<br>1 1 | 145<br>0 0 | 114<br>0 0 | 94<br>3 3 |
| Cosmetology | Total<br>Female % | 193<br>160 83 | 215<br>190 88 | 196<br>175 89 | 195<br>176 90 |

| All Colleges (cont'd.) | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| Diesel Machines:<br>Diesel Mechanics | Total | 33 | 27 | 38 | 39 |
| | Female | 0 | 0 | 0 | 1 |
| | % | 0 | 0 | 0 | 3 |
| Heavy Equip. Maint. & Repair | Total | 72 | 71 | 75 | 71 |
| | Female | 0 | 0 | 0 | 1 |
| | % | 0 | 0 | 0 | 1 |
| Drafting Technology:<br>Architect Draft. Tech. | Total | 168 | 119 | 128 | 145 |
| | Female | 21 | 22 | 20 | 23 |
| | % | 22 | 18 | 16 | 16 |
| Draft. & Eng. Aide | Total | 33 | 32 | 21 | 25 |
| | Female | 6 | 8 | 4 | 2 |
| | % | 18 | 25 | 19 | 8 |
| Drafting Tech. | Total | 103 | 127 | 137 | 131 |
| | Female | 14 | 19 | 21 | 26 |
| | % | 14 | 15 | 15 | 20 |
| Electronics | Total | 340 | 370 | 361 | 364 |
| | Female | 9 | 11 | 15 | 17 |
| | % | 3 | 3 | 4 | 5 |
| Engineering Tech. | Total | 55 | 41 | 48 | 55 |
| | Female | 5 | 2 | 2 | 0 |
| | % | 9 | 5 | 4 | 0 |
| Maintenance Tech. | Total | 22 | 17 | 25 | 16 |
| | Female | 0 | 0 | 1 | 1 |
| | % | 0 | 0 | 4 | 6 |
| Marine Tech. | Total | 135 | 110 | 122 | 108 |
| | Female | 7 | 10 | 15 | 19 |
| | % | 5 | 9 | 12 | 18 |
| Metal Working Trades:<br>Machine Shop Tech. | Total | 90 | 124 | 162 | 150 |
| | Female | 2 | 2 | 4 | 1 |
| | % | 2 | 2 | 2 | 1 |
| Sheet Metal & Plastic | Total | 69 | 42 | 36 | 32 |
| | Female | 0 | 0 | 1 | 0 |
| | % | 0 | 0 | 3 | 0 |
| Weld. & Sheet Metal | Total | 31 | 38 | 27 | 31 |
| | Female | 0 | 0 | 0 | 0 |
| | % | 0 | 0 | 0 | 0 |
| Welding Tech. | Total | 171 | 178 | 176 | 175 |
| | Female | 4 | 2 | 0 | 3 |
| | % | 2 | 1 | 0 | 2 |
| Marine Pipefitter | Total | - | 28 | 43 | 42 |
| | Female | - | 0 | 0 | 0 |
| | % | | 0 | 0 | 0 |
| Refrig. Tech. | Total | 126 | 127 | 141 | 139 |
| | Female | 1 | 0 | 0 | 0 |
| | % | 1 | 0 | 0 | 0 |

*1976-77 - No sex data for 8 students
1977-78 - " " " " 14 "
1978-79 - " " " " 3 "
1979-80 - " " " " 8 "

Note: 1976 and 1977 Vocational Education Program totals in this report do not include enrollment figures for those programs which were discontinued in subsequent years. These are:

| | | Total | Female |
|---|---|---|---|
| 1976: | Med. Records Tech. | 11 | 11 |
| | Health Aide | 4 | 4 |
| | Ed. Ass't. | 14 | 14 |
| | Sheet Metal Tech. | 1 | 0 |
| 1977: | Medical Records Tech. | 1 | 1 |

## VOCATIONAL EDUCATION PROGRAM ENROLLMENT BY SEX

1976 - 1980

HAWAII COMMUNITY COLLEGE

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| College Enrollment | Total<br>Female % | 1574<br>669 43 | 2242<br>1026 46 | 2137<br>1032 48 | 2181<br>1090 50 |
| Vocational Education Program Enrollment | Total<br>Female % | 1040<br>452 43 | 1134<br>535 47 | 1044<br>482 46 | 1055<br>487 46 |
| BUSINESS | Total<br>Female % | 179<br>108 60 | 205<br>117 57 | 179<br>111 62 | 240<br>146 61 |
| Accounting & Related:<br>Accounting (2 yr.) | Total<br>Female % | 93<br>65 70 | 110<br>73 66 | 94<br>68 72 | 95<br>72 76 |
| Data Processing:<br>Data Processing | Total<br>Female % | 33<br>17 52 | 18<br>10 56 | 1<br>0 0 | 27<br>15 56 |
| Sales & Management:<br>Merch. | Total<br>Female % | 53<br>26 49 | 77<br>34 44 | 84<br>43 51 | 118<br>59 50 |
| SECRETARIAL AND RELATED | Total<br>Female % | 219<br>216 99 | 258<br>255 99 | 242<br>238 97 | 218<br>215 99 |
| Clerical General | Total<br>Female % | 110<br>107 97 | 145<br>142 98 | 136<br>132 97 | 110<br>107 97 |
| Secretarial Science | Total<br>Female % | 109<br>109 100 | 113<br>113 100 | 106<br>106 100 | 108<br>108 100 |
| HEALTH SERVICE | Total<br>Female % | 46<br>43 93 | 54<br>47 87 | 57<br>43 75 | 52<br>45 87 |
| Assoc. Degree Nursing | Total<br>Female % | 23<br>21 91 | 34<br>28 82 | 36<br>28 78 | 32<br>26 81 |
| Practical Nursing | Total<br>Female % | 23<br>22 96 | 20<br>19 95 | 21<br>15 71 | 20<br>19 95 |
| HOTEL/FOOD SERVICE<br>Food Service | Total<br>Female % | 49<br>17 35 | 48<br>26 54 | 38<br>18 47 | 47<br>16 34 |
| PUBLIC SERVICE | Total<br>Female % | 141<br>28 20 | 157<br>39 25 | 115<br>27 23 | 92<br>21 23 |
| Fire Science | Total<br>Female % | 24<br>0 0 | 20<br>0 0 | 18<br>0 0 | 17<br>0 0 |
| Police Science | Total<br>Female % | 117<br>28 24 | 137<br>39 28 | 97<br>27 28 | 75<br>21 28 |
| TRADES AND TECHNOLOGY | Total<br>Female % | 406<br>40 10 | 412<br>51 12 | 413<br>45 11 | 406<br>44 11 |
| Agriculture:<br>Agriculture (2 yr.) | Total<br>Female % | 74<br>8 11 | 77<br>9 12 | 73<br>4 5 | 79<br>13 16 |
| Apparel Trades:<br>Apparel Design | Total<br>Female % | 26<br>26 100 | 34<br>34 100 | 35<br>33 94 | 24<br>24 100 |
| Fashion Design & Merch. | Total<br>Female % | -<br>- | -<br>- | 1<br>1 100 | -<br>- |
| Automotive Tech:<br>Auto Body Rep. & Maint. | Total<br>Female % | 34<br>0 0 | 35<br>0 0 | 40<br>0 0 | 44<br>1 2 |
| Auto Mechanics Tech. | Total<br>Female % | 39<br>0 0 | 39<br>0 0 | 47<br>0 0 | 45<br>0 0 |
| Bldg. Const. Tech.:<br>Carpentry | Total<br>Female % | 39<br>0 0 | 37<br>0 0 | 40<br>1 3 | 28<br>0 0 |
| Electricity | Total<br>Female % | 43<br>0 0 | 36<br>0 0 | 34<br>0 0 | 33<br>1 3 |
| Diesel Machines<br>Diesel Mech. | Total<br>Female % | 33<br>0 0 | 27<br>0 0 | 38<br>0 0 | 39<br>1 3 |
| Drafting Technology:<br>Draft. & Eng. Aide | Total<br>Female % | 31<br>6 19 | 32<br>8 25 | 21<br>4 19 | 24<br>2 8 |
| Electronics:<br>Electronics Tech. | Total<br>Female % | 29<br>0 0 | 31<br>0 0 | 33<br>2 6 | 31<br>2 6 |
| Metal Working Trades:<br>Machine Shop Tech. | Total<br>Female % | 27<br>0 0 | 26<br>0 0 | 24<br>0 0 | 28<br>0 0 |
| Weld. & Sheet Metal | Total<br>Female % | 31<br>0 0 | 38<br>0 0 | 27<br>0 0 | 31<br>0 0 |

# VOCATIONAL EDUCATION PROGRAM ENROLLMENT BY SEX

## 1976 - 1980

HONOLULU COMMUNITY COLLEGE

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| College Enrollment | Total | 5502 | 5498 | 5407 | 5603 |
| | Female % | 1555 28 | 1633 30 | 1648 30 | 1901 34 |
| Vocational Education Program Enrollment | Total | 3540 | 3734 | 3787 | 3720 |
| | Female % | 679 19 | 804 22 | 877 23 | 947 25 |
| SECRETARIAL AND RELATED Clerical Steno | Total | - | - | 55 | 53 |
| | Female % | - | - | 53 96 | 51 96 |
| HOTEL/FOOD SERVICE Commercial Baking | Total | 53 | 62 | 71 | 64 |
| | Female % | 17 32 | 15 24 | 20 28 | 24 37 |
| PUBLIC SERVICE | Total | 976 | 1025 | 979 | 887 |
| | Female % | 289 30 | 353 34 | 334 34 | 355 40 |
| Fire Science | Total | 251 | 237 | 231 | 182 |
| | Female % | 0 0 | 0 0 | 1 1 | 1 1 |
| Human Services | Total | 256 | 341 | 347 | 362 |
| | Female % | 213 83 | 292 86 | 285 82 | 303 84 |
| Industrial Education | Total | 39 | 51 | 44 | 42 |
| | Female % | 1 3 | 1 2 | 2 5 | 4 10 |
| Occupational Safety & Health | Total | 120 | 125 | 128 | 104 |
| | Female % | 8 7 | 8 6 | 10 8 | 11 11 |
| Police Science | Total | 310 | 271 | 229 | 197 |
| | Female % | 67 22 | 52 19 | 36 16 | 36 18 |
| TRADES AND TECHNOLOGY | Total | 2511 | 2647 | 2682 | 2716 |
| | Female % | 373 15 | 436 17 | 470 18 | 517 19 |
| Applied Trades | Total | 317 | 352 | 385 | 403 |
| | Female % | 9 3 | 8 2 | 17 4 | 36 9 |
| Aeronautics Tech.: Aviation Maint. | Total | 119 | 78 | 102 | 115 |
| | Female % | 1 1 | 0 0 | 4 4 | 6 5 |
| Apparel Trades: Fashion Design & Merch. | Total | 106 | 114 | 131 | 142 |
| | Female % | 104 98 | 110 96 | 126 96 | 138 97 |
| Commercial Art | Total | 156 | 181 | 214 | 218 |
| | Female % | 61 39 | 80 44 | 94 44 | 100 46 |
| Automotive Tech.: Auto Body Rep. & Maint. | Total | 175 | 122 | 118 | 119 |
| | Female % | 2 1 | 2 2 | 3 3 | 3 3 |
| Auto Mechanics Tech. | Total | 313 | 348 | 266 | 265 |
| | Female % | 5 2 | 6 2 | 7 3 | 9 3 |
| Building Const. Tech.: Carpentry | Total | 81 | 95 | 89 | 88 |
| | Female % | 1 1 | 2 2 | 4 4 | 4 5 |
| Industrial Electricity | Total | 147 | 145 | 114 | 94 |
| | Female % | 0 0 | 0 0 | 0 0 | 3 3 |
| Cosmetology | Total | 191 | 215 | 196 | 195 |
| | Female % | 158 83 | 190 88 | 175 89 | 176 90 |
| Diesel Machines: Heavy Equip. & Repair | Total | 72 | 71 | 75 | 71 |
| | Female % | 0 0 | 0 0 | 0 0 | 1 1 |
| Drafting Technology: Architect Draft Tech. | Total | 113 | 117 | 127 | 145 |
| | Female % | 11 10 | 21 18 | 20 16 | 23 16 |
| Electronics | Total | 288 | 339 | 327 | 332 |
| | Female % | 9 3 | 11 3 | 13 4 | 15 5 |
| Engineering Tech. | Total | 50 | 41 | 48 | 55 |
| | Female % | 5 10 | 2 5 | 2 4 | 0 0 |
| Metal Working Trades: Machine Shop Tech. | Total | 61 | 98 | 138 | 122 |
| | Female % | 2 3 | 2 2 | 4 3 | 1 1 |
| Sheet Metal & Plast. | Total | 69 | 42 | 36 | 32 |
| | Female % | 0 0 | 0 0 | 1 3 | 0 0 |
| Welding & Sheet Metal | Total | 127 | 134 | 132 | 139 |
| | Female % | 4 3 | 2 1 | 0 0 | 2 1 |
| Marine Pipefitter | Total | - | 28 | 43 | 42 |
| | Female % | - | 0 0 | 0 0 | 0 0 |
| Refrigeration Tech.: Refrig. & Air Cond. | Total | 126 | 127 | 141 | 139 |
| | Female % | 1 1 | 0 0 | 0 0 | 0 0 |

## VOCATIONAL EDUCATION PROGRAM ENROLLMENT BY SEX

## 1976 - 1980

KAPIOLANI COMMUNITY COLLEGE

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| College Enrollment | Total<br>Female % | 5412<br>3318 61 | 5644<br>3442 61 | 5776<br>3505 61 | 5735<br>3467 60 |
| Vocational Education Program Enrollment | Total<br>Female % | 2946<br>1934 66 | 3119<br>2034 65 | 2943<br>1896 64 | 2917<br>1842 63 |
| BUSINESS | Total<br>Female % | 1208<br>589 49 | 1256<br>636 51 | 1310<br>723 55 | 1369<br>758 55 |
| Accounting & Related:<br>Accounting (2 yr.) | Total<br>Female % | 352<br>207 59 | 371<br>220 59 | 402<br>269 67 | 377<br>253 67 |
| Data Processing:<br>Data Processing | Total<br>Female % | 204<br>97 48 | 234<br>110 47 | 239<br>112 47 | 255<br>125 49 |
| Data Proc. Oper. | Total<br>Female % | 48<br>28 58 | 38<br>27 71 | 57<br>37 65 | 60<br>32 53 |
| Sales & Management:<br>Hotel Oper. | Total<br>Female % | 327<br>170 52 | 308<br>178 58 | 324<br>204 63 | 381<br>236 62 |
| Merch. | Total<br>Female % | 277<br>87 31 | 305<br>101 33 | 288<br>101 35 | 296<br>112 38 |
| SECRETARIAL AND RELATED | Total<br>Female % | 888<br>852 96 | 882<br>841 95 | 738<br>705 96 | 640<br>622 97 |
| Business Operations | Total<br>Female % | 41<br>22 54 | 49<br>27 55 | 31<br>16 52 | 5<br>2 40 |
| Clerical Bookkeeping | Total<br>Female % | 107<br>92 86 | 98<br>85 87 | 107<br>96 90 | 103<br>92 89 |
| Clerical General | Total<br>Female % | 280<br>278 99 | 280<br>274 98 | 238<br>232 97 | 199<br>196 98 |
| Clerical Stenography | Total<br>Female % | 42<br>42 100 | 40<br>40 100 | 30<br>29 97 | 23<br>22 96 |
| Secretarial Science | Total<br>Female % | 418<br>418 100 | 415<br>415 100 | 332<br>332 100 | 310<br>310 100 |
| HEALTH SERVICES | Total<br>Female % | 358<br>307 86 | 414<br>344 83 | 325<br>258 79 | 328<br>260 79 |
| Dietetic Tech. | Total<br>Female % | 11<br>11 100 | 5<br>5 100 | 2<br>2 100 | 1<br>1 100 |
| Dental Assisting | Total<br>Female % | 24<br>22 92 | 26<br>26 100 | 20<br>20 100 | 13<br>13 100 |
| Medical Assisting | Total<br>Female % | 47<br>45 96 | 45<br>45 100 | 34<br>34 100 | 36<br>33 92 |
| Medical Lab Tech. | Total<br>Female % | 36<br>29 81 | 21<br>16 76 | 19<br>14 74 | 12<br>10 83 |
| Occup. Therapy Ass't. | Total<br>Female % | 16<br>15 94 | 28<br>26 93 | 20<br>19 95 | 31<br>28 90 |
| Practical Nursing | Total<br>Female % | 153<br>142 93 | 222<br>190 86 | 179<br>150 84 | 163<br>144 88 |
| Radiologic Tech. | Total<br>Female % | 49<br>27 55 | 52<br>25 48 | 49<br>17 35 | 51<br>21 41 |
| Respiratory Therapy | Total<br>Female % | 22<br>16 73 | 15<br>11 73 | 2<br>2 100 | 21<br>10 48 |
| HOTEL/FOOD SERVICE | Total<br>Female % | 410<br>112 27 | 466<br>127 27 | 470<br>125 27 | 489<br>126 26 |
| Food Service | Total<br>Female % | -<br>- | -<br>- | 275<br>78 28 | 286<br>77 27 |
| Food Service - Cul. Art. | Total<br>Female % | 122<br>37 30 | 164<br>37 23 | 160<br>33 21 | 176<br>40 23 |
| Food Service - Din. Rm. | Total<br>Female % | 40<br>12 30 | 36<br>16 44 | 26<br>11 42 | 27<br>9 33 |
| Food Service Mgmt. | Total<br>Female % | 248<br>63 25 | 266<br>74 28 | 9<br>3 33 | -<br>- |
| PUBLIC SERVICE<br>Legal Assistant | Total<br>Female % | 82<br>74 90 | 101<br>86 85 | 100<br>85 85 | 91<br>76 84 |

# VOCATIONAL EDUCATION PROGRAM ENROLLMENT BY SEX

## 1976 - 1980

KAUAI COMMUNITY COLLEGE

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| College Enrollment | Total<br>Female % | 1687<br>755 45 | 1677<br>820 49 | 1592<br>832 49 | 1523<br>801 53 |
| Vocational Education Program Enrollment | Total<br>Female % | 544<br>240 44 | 534<br>248 46 | 593<br>274 46 | 532<br>273 51 |
| BUSINESS | Total<br>Female % | 63<br>43 68 | 81<br>57 70 | 146<br>96 66 | 158<br>115 73 |
| Accounting & Related: Accounting 2 yr. | Total<br>Female % | 63<br>43 68 | 81<br>57 70 | 82<br>59 72 | 105<br>80 76 |
| Sales and Mgmt.: Merch. | Total<br>Female % | -<br>- | -<br>- | 64<br>37 58 | 53<br>35 66 |
| SECRETARIAL AND RELATED | Total<br>Female % | 159<br>139 87 | 159<br>140 88 | 113<br>112 99 | 132<br>130 98 |
| Clerical Typist | Total<br>Female % | 63<br>63 100 | 62<br>62 100 | 66<br>65 98 | 75<br>73 97 |
| Secretarial Science | Total<br>Female % | 40<br>40 100 | 37<br>37 100 | 46<br>46 100 | 57<br>57 100 |
| General Business | Total<br>Female % | 56<br>36 64 | 60<br>41 68 | 1<br>1 100 | -<br>- |
| HEALTH SERVICE | Total<br>Female % | 45<br>43 96 | 37<br>35 95 | 54<br>50 93 | 20<br>19 95 |
| Assoc. Degree Nursing | Total<br>Female % | 13<br>12 92 | 9<br>9 100 | 24<br>22 92 | 14<br>14 100 |
| Practical Nursing | Total<br>Female % | 32<br>31 97 | 28<br>26 93 | 30<br>28 93 | 6<br>5 83 |
| PUBLIC SERVICE | Total<br>Female % | 72<br>10 14 | 65<br>8 12 | 77<br>9 12 | 46<br>1 2 |
| Fire Science | Total<br>Female % | 18<br>0 0 | 18<br>0 0 | 28<br>0 0 | 21<br>0 0 |
| Police Science | Total<br>Female % | 54<br>10 19 | 47<br>8 7 | 49<br>9 18 | 25<br>1 4 |
| TRADES AND TECHNOLOGY | Total<br>Female % | 205<br>5 2 | 192<br>8 4 | 203<br>7 3 | 176<br>8 5 |
| Automotive Tech.: Auto Body Rep. & Maint. | Total<br>Female % | 26<br>0 0 | 29<br>0 0 | 32<br>0 0 | 32<br>0 0 |
| Auto Mech. Tech. | Total<br>Female % | 61<br>1 2 | 63<br>0 0 | 71<br>1 1 | 70<br>1 1 |
| Bldg. Constr. Tech.: Carpentry | Total<br>Female % | 66<br>0 0 | 43<br>0 0 | 51<br>2 4 | 49<br>5 10 |
| Drafting Technology: Arch. Drafting Tech. | Total<br>Female % | 23<br>4 17 | 1<br>1 100 | 1<br>0 0 | - |
| Drafting Tech. | Total<br>Female % | - | 30<br>7 23 | 24<br>4 17 | 8<br>1 12 |
| Metal Working Trades Welding Tech. | Total<br>Female % | 29<br>0 0 | 26<br>0 0 | 24<br>0 0 | 17<br>1 6 |

## VOCATIONAL EDUCATION PROGRAM ENROLLMENT BY SEX

## 1976 - 1980

LEEWARD COMMUNITY COLLEGE

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| College Enrollment | Total | 7902 | 8636 | 8072 | 7579 |
| | Female | 3282 | 3872 | 3809 | 3550 |
| | % | 42 | 45 | 47 | 47 |
| Vocational Education Program Enrollment | Total | 2018 | 1931 | 1928 | 2026 |
| | Female | 718 | 735 | 766 | 816 |
| | % | 36 | 38 | 40 | 40 |
| BUSINESS | Total | 967 | 882 | 825 | 909 |
| | Female | 311 | 322 | 331 | 386 |
| | % | 32 | 37 | 40 | 42 |
| Accounting & Related: Accounting (2 yr.) | Total | 368 | 322 | 300 | 311 |
| | Female | 223 | 204 | 207 | 213 |
| | % | 61 | 63 | 69 | 68 |
| Data Processing: Computer Science | Total | 192 | 193 | 180 | 211 |
| | Female | 48 | 64 | 58 | 74 |
| | % | 35 | 33 | 32 | 35 |
| Sales and Managment: Mgmt. (2 yr.) | Total | 407 | 367 | 345 | 387 |
| | Female | 40 | 54 | 66 | 99 |
| | % | 10 | 15 | 19 | 26 |
| SECRETARIAL AND RELATED | Total | 282 | 286 | 272 | 253 |
| | Female | 275 | 282 | 268 | 249 |
| | % | 98 | 99 | 99 | 98 |
| Clerical Typist | Total | 72 | 62 | 54 | 61 |
| | Female | 71 | 61 | 51 | 57 |
| | % | 99 | 97 | 94 | 93 |
| Secretarial Science | Total | 210 | 224 | 218 | 192 |
| | Female | 204 | 221 | 217 | 192 |
| | % | 97 | 99 | 99 | 100 |
| HOTEL/FOOD SERVICE Food Service | Total | 113 | 131 | 153 | 140 |
| | Female | 38 | 35 | 48 | 53 |
| | % | 34 | 27 | 32 | 38 |
| PUBLIC SERVICE | Total | 142 | 141 | 135 | 119 |
| | Female | 64 | 71 | 68 | 61 |
| | % | 45 | 50 | 50 | 51 |
| Library Technology | Total | 33 | 36 | 35 | 23 |
| | Female | 30 | 33 | 32 | 22 |
| | % | 91 | 92 | 91 | 96 |
| Rec. Instructor | Total | 109 | 105 | 100 | 96 |
| | Female | 34 | 38 | 36 | 39 |
| | % | 31 | 36 | 36 | 41 |
| TRADES AND TECHNOLOGY | Total | 514 | 491 | 543 | 605 |
| | Female | 30 | 25 | 51 | 67 |
| | % | 6 | 5 | 9 | 11 |
| Commercial Arts: Graphic Art | Total | 27 | 42 | 60 | 58 |
| | Female | 6 | 7 | 18 | 20 |
| | % | 22 | 17 | 30 | 34 |
| Automotive Tech.: Auto Mech. Tech. | Total | 263 | 268 | 278 | 347 |
| | Female | 3 | 4 | 5 | 12 |
| | % | 1 | 1 | 2 | 3 |
| Drafting Technology | Total | 100 | 75 | 86 | 95 |
| | Female | 14 | 7 | 13 | 17 |
| | % | 14 | 9 | 15 | 18 |
| Marine Tech. | Total | 124 | 106 | 119 | 105 |
| | Female | 7 | 7 | 15 | 18 |
| | % | 6 | 7 | 13 | 17 |

## VOCATIONAL EDUCATION PROGRAM ENROLLMENT BY SEX
## 1976 - 1980

**MAUI COMMUNITY COLLEGE**

| | | 1976-77 | 1977-78 | 1978-79 | 1979-80 |
|---|---|---|---|---|---|
| College Enrollment | Total | 2259 | 2308 | 2446 | 2676 |
| | Female | 1144 | 1220 | 1326 | 1523 |
| | % | 51 | 53 | 54 | 57 |
| Vocational Education Program Enrollment | Total | 842 | 893 | 983 | 956 |
| | Female | 421 | 446 | 519 | 530 |
| | % | 50 | 50 | 53 | 55 |
| BUSINESS | Total | 223 | 242 | 250 | 246 |
| | Female | 113 | 128 | 149 | 153 |
| | % | 51 | 53 | 60 | 62 |
| Accounting & Related: Accounting (2 yr.) | Total | 75 | 96 | 103 | 114 |
| | Female | 47 | 69 | 78 | 89 |
| | % | 63 | 72 | 76 | 78 |
| Sales & Management: Hotel Oper. | Total | 127 | 118 | 111 | 93 |
| | Female | 56 | 50 | 57 | 50 |
| | % | 44 | 42 | 51 | 54 |
| Merch. | Total | 21 | 28 | 36 | 39 |
| | Female | 10 | 9 | 14 | 14 |
| | % | 48 | 32 | 39 | 36 |
| SECRETARIAL AND RELATED | Total | 175 | 172 | 164 | 144 |
| | Female | 170 | 165 | 161 | 140 |
| | % | 97 | 96 | 98 | 97 |
| Gen. Office Trng. | Total | 108 | 112 | 111 | 98 |
| | Female | 103 | 106 | 109 | 94 |
| | % | 95 | 95 | 98 | 96 |
| Secretarial Science | Total | 67 | 60 | 53 | 46 |
| | Female | 67 | 59 | 52 | 46 |
| | % | 100 | 98 | 98 | 100 |
| HEALTH SERVICE | Total | 73 | 73 | 89 | 118 |
| | Female | 71 | 69 | 82 | 105 |
| | % | 97 | 95 | 92 | 89 |
| Assoc. Degree Nursing | Total | 62 | 59 | 70 | 102 |
| | Female | 60 | 56 | 66 | 90 |
| | % | 97 | 95 | 94 | 88 |
| Practical Nursing | Total | 11 | 14 | 19 | 16 |
| | Female | 11 | 13 | 16 | 15 |
| | % | 100 | 93 | 84 | 94 |
| HOTEL/FOOD SERVICE Food Service | Total | - | 20 | 58 | 52 |
| | Female | - | 6 | 29 | 29 |
| | % | | 30 | 50 | 56 |
| PUBLIC SERVICE | Total | 85 | 84 | 105 | 96 |
| | Female | 33 | 32 | 51 | 56 |
| | % | 38 | 38 | 49 | 58 |
| Human Services | Total | 28 | 28 | 46 | 48 |
| | Female | 27 | 24 | 41 | 45 |
| | % | 96 | 86 | 89 | 94 |
| Police Science | Total | 57 | 56 | 59 | 48 |
| | Female | 6 | 8 | 10 | 11 |
| | % | 11 | 14 | 17 | 23 |
| TRADES AND TECHNOLOGY | Total | 286 | 301 | 317 | 300 |
| | Female | 34 | 46 | 47 | 47 |
| | % | 12 | 15 | 15 | 16 |
| Agriculture: Agriculture (2 yr.) | Total | 51 | 69 | 91 | 75 |
| | Female | 3 | 14 | 16 | 11 |
| | % | 6 | 20 | 18 | 15 |
| Apparel Trades: Apparel Design | Total | 21 | 23 | 23 | 22 |
| | Female | 21 | 22 | 23 | 22 |
| | % | 100 | 96 | 100 | 100 |
| Automotive Tech.: Auto Body Rep. & Paint | Total | 28 | 26 | 28 | 34 |
| | Female | 0 | 1 | 1 | 1 |
| | % | 0 | 4 | 4 | 3 |
| Auto Mech. Tech. | Total | 74 | 86 | 60 | 69 |
| | Female | 4 | 1 | 1 | 2 |
| | % | 5 | 1 | 2 | 3 |
| Bldg. Constr. Tech.: Carpentry | Total | 52 | 41 | 46 | 41 |
| | Female | 2 | 3 | 1 | 3 |
| | % | 4 | 7 | 2 | 7 |
| Drafting Technology: Drafting Tech. | Total | 25 | 22 | 24 | 24 |
| | Female | 4 | 5 | 4 | 7 |
| | % | 16 | 23 | 17 | 29 |
| Maintenance Tech.: Bldg. Maint. | Total | 22 | 17 | 25 | 16 |
| | Female | 0 | 0 | 1 | 1 |
| | % | 0 | 0 | 4 | 6 |
| Metal Working Trade: Welding Tech. | Total | 13 | 17 | 20 | 19 |
| | Female | 0 | 0 | 0 | 0 |
| | % | 0 | 0 | 0 | 0 |

## VOCATIONAL EDUCATION PROGRAM ENROLLMENT BY SEX
### 1976 - 1980

WINDWARD COMMUNITY COLLEGE

| | | 1976-77 | | 1977-78 | | 1978-79 | | 1979-80 | |
|---|---|---|---|---|---|---|---|---|---|
| College Enrollment | Total | 1635 | | 1766 | | 1941 | | 2055 | |
| | Female % | 830 | 51 | 994 | 56 | 1121 | 58 | 1210 | 59 |
| Vocational Education Program Enrollment | Total | 33 | | 91 | | 140 | | 251 | |
| | Female % | 31 | 94 | 71 | 78 | 97 | 69 | 163 | 65 |
| BUSINESS | Total | - | | 14 | | 30 | | 77 | |
| | Female % | - | | 13 | 93 | 26 | 87 | 61 | 79 |
| Accounting & Related: Accounting (2 yr.) | Total | - | | 9 | | 22 | | 62 | |
| | Female % | - | | 8 | 89 | 21 | 95 | 50 | 81 |
| Finance (2 yr.) | Total | - | | 5 | | 8 | | 15 | |
| | Female % | - | | 5 | 100 | 5 | 63 | 11 | 73 |
| SECRETARIAL AND RELATED | Total | 29 | | 61 | | 68 | | 96 | |
| | Female % | 27 | 93 | 57 | 93 | 67 | 99 | 96 | 100 |
| Clerical Stenography | Total | 29 | | 38 | | 44 | | 47 | |
| | Female % | 27 | 93 | 34 | 89 | 43 | 98 | 47 | 100 |
| Secretarial Science | Total | 4 | | 23 | | 24 | | 49 | |
| | Female % | 4 | 100 | 23 | 100 | 24 | 100 | 49 | 100 |
| PUBLIC SERVICE Social Justice | Total | 15 | | - | | 4 | | 15 | |
| | Female % | 14 | 93 | - | | 3 | 75 | 6 | 40 |
| TRADES AND TECHNOLOGY Auto Mechanics Tech. | Total | - | | 16 | | 38 | | 63 | |
| | Female % | - | | 1 | 6 | 1 | 3 | 0 | 0 |

*Source:* *Report 2541, Unduplicated Headcount of Students Served by the Community Colleges, Office of the Chancellor for Community Colleges, University of Hawaii.*

# APPENDIX C

## AWARENESS RAISING WORKSHOP—BASIC COMPONENTS

**Topic Areas**

|  | *Target Group* |  |  |
|---|---|---|---|
|  | Student | Faculty | Other |
| Sex equity legislation | x | x | x |
| Occupational sex stereotyping and bias | x | x | x |
| Costs of sex bias and stereotyping | x | x | x |
| How to identify sex-biased behaviors | x | x | x |
| Affirmative teaching and counseling |  | x |  |
| Vocational exploration | x |  |  |

*Sex equity legislation.* Overview of Title II, VEA 1976, PL 94-482 sex equity provisions in the context of related protective legislation; i.e., Executive Order 11246 as amended by Executive Orders 11375 and 12086 and Revised Order No. 4; Title VII of the Civil Rights Act as amended by the Equal Employment Opportunity Act of 1972; Equal Pay Act of 1963 as amended by the Education Amendments of 1972; Title IX of the Education Amendments as amended by the Bayh Amendment of 1974.

*Occupational sex stereotyping and sex bias.* Overview of division of labor according to sex. Actual employment statistics can be used to stimulate discussion concerning imbalances in representation of the sexes in the work world. The important conclusions to be drawn from statistics would indicate an underutilization of females in the work force.

*Costs of sex bias and stereotyping.* Costs are incurred by the following:

- the individual, in terms of personal development and economic self-sufficiency
- society, in terms of the inconsistency between social policy (equality) and practices (discrimination). Maintaining economically disadvantaged groups has shown to lead to social unrest and upheaval
- the economy; theoretically, opening up opportunities to both sexes enlarges the talent pool leading to greater productivity.

*How to identify sex-biased behaviors.* Straightforward presentation of sex stereotypes and sex-biased behaviors that limit people's career choices.

*Affirmative teaching and counseling.* Presentation of ways vocational faculty can recruit and retain nontraditional students.

*Vocational exploration.* Affirmative career education to encourage students to enroll in nontraditional programs. This is a recruitment strategy involving hands-on workshops or mini-courses for those who have not yet decided on an occupational field, or who are leaning toward a nontraditional career; and presenting workers in nontraditional jobs as role models.

**Methods**

Topics may be presented and reinforced by the following methods:

1. Lecture or panel, with or without audio visual aids, may be the best means of presenting background information on all topic areas.

2. Small group breakout sessions. Lecture presentations should be followed by small group (3-7 persons) sessions which explore in greater detail the substance of the preceding lecture. Group activities may include:
   a. Discussions relating the lecture topic to personal experiences;
   b. Encounter group activities, such as role playing, which are a good means of reinforcing factual information.
   c. Games such as Cinderella and the Prince, EEO game;
   d. Other group tasks such as developing methods of recruiting students into a particular program.

3. Nominal Group Technique (Delbecq). This exercise is an efficient means of identifying and prioritizing problems or solutions. It may be scheduled at any time during the workshop except as the last event. (The workshop

should end on a communal note, which is difficult to achieve with Delbecq.)

**Trainers**

OSDVE Staff: Cordinator of Special Services, Coordinator of Technical Assistance and MIS
Deputy Attorney General, University of Hawaii
Community College instructors who have conducted sex equity workshops

**Other**

The number of possible approaches to sex equity awareness raising goes far beyond what is outlined above. The material that follows may be useful in developing awareness programs (Deanna Chitayat et al., *Project SEISMIC: Sex Equity in Schools/Modules in Careers,* New York: Institute for Research and Development in Occupational Education, Center for Advanced Study in Education, Graduate School and University Center of the City University of New York, 1981; see also other resource materials on file at OSDVE).

# *III. Planning a Program Presentation*

After you have arranged a date for presentation of a program to a community group, you must prepare the details of the program.

An effective program will contain materials of interest to participants, will be well-planned to fit within time allotted, and will be managed efficiently in terms of equipment and space needs. Your community group contact can be helpful in assisting you, particularly in determining the interests of your audience.

The time available will help you to decide what you can do during the program. The more time, the greater the opportunity to use small group discussions and activities. If you only have 30 to 45 minutes, select group discussions judiciously; you will probably be able to use only a few brief presentations and handouts. Use the participative activities when adequate time is available. Intersperse these between brief presentations.

This segment of the guide includes:

A. Pre-program checklist
B. Sample programs for varied time limits
(Presentations, handouts, activity worksheets, fact sheets, chart, etc. referred to appear in Segment 4 of this guide).

## A. PRE-PROGRAM CHECKLIST

Prepare for the program by making the following arrangements:

1. If your program calls for the use of small group activities, be sure your meeting room can accomodate participants in small table groups with approximately four, five, or six people per table. Try to have at least two groups so that comparisons of decisions between them can be made. Even if you have only six participants attending the program, two groups of three people each would be preferable to only one group of six.
2. When making your seating arrangements, try to have a good mix between males and females in each group so that, wherever possible, completely heterogeneous groups are formed.
3. Be sure that the necessary equipment is available. Depending upon your program, you may need a videotape playback/TV monitor, and a flipchart or blackboard.
4. If you plan to use an activity worksheet, or to hand out any of the material for reference, be sure that you prepare enough copies for distribution.

## B. SAMPLE PROGRAM PRESENTATIONS

Italics refer to major subject areas in Segment 4, with specific components suggested.

### #1 - Emphasis on Changing Roles (for a 30 to 45 minute meeting)

1. *Workers in Non-Traditional Jobs*
   Pre-videotape discussion - 5 minutes
   Show Videotape, "New on the Job" - 15 minutes
   Post-tape discussion questions - 5 minutes
2. *Changing Roles for Females and Males*
   Presentation - 5 minutes
3. *Employment Statistics*
   Fact sheet - 10 minutes
4. *Protective Legislation*
   Chart: Federal Laws and Regulations - 5 minutes
5. Steps to Advance Equal Employment Opportunity
   Appendix B - 5 minutes

### #2 Emphasis on Legislation (for a 30 to 45 minute meeting)

1. *Protective Legislation*
   Chart: Federal Laws and Regulations - 10 minutes
2. *Workers in Non-Traditional Jobs*
   Show videotape, "New on the Job" - 15 minutes.
   Post-tape discussion questions - 5 minutes
3. *Changing Roles for Females and Males*
   Presentation - 5 minutes
4. *Protective Legislation*
   Presentation: Court Ordered Changes - 5 minutes
5. "Basic Steps to Develop an Effective Affirmative Action Program
   Appendix C 5 minutes

### #3 - Emphasis on Statistics (for a 30 to 45 minute meeting)

1. *Employment Statistics*
   Fact sheet - 10 minutes
2. *Changing Roles for Females and Males*
   Presentation - 5 minutes
3. *Workers in Non-Traditional Jobs*
   Show Videotape, "New on the Job" - 15 minutes.
   Post-tape discussion questions - 5 minutes
4. *Protective Legislation*
   Chart: Federal Laws and Regulations - 5 minutes
5. "Steps to Advance Equal Employment Opportunity"
   Appendix B - 5 minutes

**#4 - Emphasis on Changing Roles (for a 90 minute meeting)**

1. *Workers in Non-Traditional Jobs*
   Pre-videotape discussion - 5 minutes
   Show Videotape, "New on the Job" - 15 minutes.
   Post-tape discussion questions - 5 minutes
2. *Changing Roles for Females and Males*
   Presentation - 10 minutes
   Activity Worksheet - 15 minutes
   Feedback - 5 minutes
3. *Employment Statistics*
   Fact sheet - 10 minutes
4. *Protective Legislation*
   Chart: Federal Laws and Regulations - 10 minutes
5. *Changes in Employment Patterns*
   Presentation: Major Job Training Programs - 10 minutes

**#5 - Emphasis on Legislation (for a two-and-one-half hour meeting)**

1. *Protective Legislation*
   If possible, try to have an attorney familiar with these laws, a representative of the Department of Labor, or an affirmative action coordinator present an overview of the laws of the program - 30 minutes.
2. "Basic Steps to Develop an Effective Affirmative Action Program"
   Appendix C - 10 minutes
3. *Workers in Non-Traditional Jobs*
   Pre-videotape discussion - 5 minutes
   Show Videotape, "New on the Job" - 15 minutes.
   Post-tape discussion questions - 10 minutes
4. *(15-minute break)*
5. *Changing Roles for Females and Males*
   Presentation - 10 minutes
   Activity Worksheet - 15 minutes
   Feedback - 5 minutes
6. *Employment Statistics*
   Fact sheet - 10 minutes
7. *Protective Legislation*
   Presentation: Court Ordered Changes - 10 minutes
8. *Protective Legislation*
   Chart: Federal Laws and Regulation - 10 minutes

## *IV. Selecting Program Components*

In this segment are a variety of program components, including presentations, handouts, and activity worksheets. The presentations provide information which may be related to participants as a lecture, or distributed to them in the form of handouts. The activities provide exercises for further reinforcement.

You may use the materials in whatever order you choose for a particular meeting. Try to limit each presentation to 10 to 15 minutes; then if you have time, ask participants to work on an activity. In some cases, it may even be desirable to begin with an activity, followed by a presentation.

The activity worksheet items may be used in several ways: each participant answers questions on an individual basis; a small group discusses an item and arrives at a consensus answer; participants answer individually first and then discuss as a group.

Program components are provided for five major subject areas:

- Workers in Non-Traditional Jobs
- Protective Legislation
- Employment Statistics
- Changing Roles of Females and Males
- Changes in Employment Patterns

## SUBJECT: WORKERS IN NON-TRADITIONAL JOBS

Full sex fairness in employment requires more men and women working in previously all-female or all-male occupations. This concept often raises questions among small business owners, especially if they have not been in contact with non-traditional workers.

The major program component in this section is the use of a videotape, "New on the Job" to show workers in non-traditional jobs and their employers.

Materials include:

- Pre-videotape discussion outline
- Synopsis of videotape: "New on the Job"
- Discussion questions based on the videotape

### Pre-Videotape Discussion

Before starting the tape, engage the audience in a brief discussion of stereotyped and employment. Ask questions like:

1. *What kinds of jobs have traditionally been labeled "men's work"?*
2. *What types of jobs have traditionally been labeled "women's work"?*

If possible, write the job titles suggested by the audience onto a chart pad or blackboard so you can refer to them later.

3. *What is it about these jobs that has caused them to be stereotyped in this way?*
4. *Are these judgments concerning these jobs entirely valid? Why?*

During the discussion about stereotypes, mention that very few occupations have job requirements oriented to only one of the two sexes.

Perhaps because men have traditionally done heavy physical labor, we have created a stereotype to fit the job. Or, perhaps because women make up a disproportionate percentage of clerical workers, we have labeled these jobs "women's work".

Remind participants that both men and women come in all sizes with diverse skills and abilities that may qualify them for many different types of work.

You could also mention:

- *In a society in which no sex bias exists, very few occupations would be dominated by either sex.*
- *Those occupations that would be dominated by one sex are probably only those that require extremely specific physical characteristics for job success. All others in such a society would have an equal or near equal number of males and females.*

You may also raise the following question with the group: *What has to be done in our present society to assure full sex equity?* Some changes that might be required would include:

- *Changes in attitude and philosophy regarding employment of females and males, and their upward mobility.*
- *Changes in family structure, and attitudes and roles regarding parenting.*
- *Greater assurance that the educational process provides young people with a full range of career options regardless of their sex.*

Ask participants to add other items to this listing.

After a brief discussion of these topics, inform the group that they will be seeing a videotape on people in non-traditional jobs. Ask them to keep the discussion in mind as they view the film.

At this point, show the videotape.

### Synopsis of Videotape: "New on the Job"

The videotape presents interviews with three people working in a non-traditional setting for their sex. A narrator sets the scene by referring to the changing work world.

Jackie Simmons is an electrician apprentice working at an apartment building construction site. She enjoys seeing the product of her work—all the apartments lit up—and knowing she helped to make it happen. She sees the men on the job as individuals: some accept her; others do not. Her supervisors feel she is doing her share of the work; if she needs help, she'll ask for it. They are proud that their union has opened the field to women before government laws forced them to do it.

Mary Jane Squires is a customer engineer for IBM. She services typwriters for clients by operating the machine, diagnosing the problem and fixing the machine, using her fingers and hand tools. She is aware of the problem of some women using their "femininity" to get special treatment or to explain difficulties. However, her attitude is that "all of us will face a situation in which we don't know how to fix one of the machines —that's a customer engineer problem, not a *female* customer engineer problem." She also speaks of the pressure to do well when you are the "only one of your kind" at a meeting. Her supervisor speaks of the need to keep expectations the same for all workers. He also mentions the opportunities for women, and men, in this growing field.

Louis Serrano is a day care worker in a center for 3- and 4-year olds. He is seen leading the children in song and helping them at a "milk" break. He speaks of serving as a male role model for the children of women without husbands and of showing that males do not lose their manhood by caring for young children. His supervisor points out that there have been no complaints from parents about a male working with their young children. He mentions the common traits of all people who work with children: caring and having a sense of esteem from the work.

**Discussion Questions Based on the Videotape**

1. What is your overall reaction to the people on the videotape?
2. What other jobs, besides those described, have been traditionally single-sex positions but are now changing?
3. What steps can both large and small businesses alike take to encourage greater access to all jobs by both sexes?
4. What can, and should, an organization do when it has one or several types of jobs dominated by only one of the sexes?
5. What can the business sector do in schools to encourage young people to seek jobs based on their talents, and interests, and not on preconceived stereotypes?
6. What can parents do to encourage their children to seek jobs based on their talents and interests?

## SUBJECT: PROTECTIVE LEGISLATION

The laws governing equal employment are particularly important to businesspeople because they must ensure compliance with them.

The program components include a chart summarizing the major laws designed to mandate equal employment (which can be given as a handout for discussion or reference, or which can be made into a transparency for presentation); an activity worksheet for participants to "test" their knowledge; feedback for the activity worksheet; a section for reference or presentation on court ordered changes as a result of the laws (often more dramatic and concrete than the laws themselves as a presentation). Also helpful to the speaker as a reference or as a presentation is Appendix A which clarifies the concept of the consequences of employment practices as a further understanding of equal employment laws. This appendix also contains more fully developed analyses of the laws in the chart. Speakers may use these materials in any order they wish.

Materials include:

- Federal laws and regulations concerning sex discrimination (chart/handout)
- Protective legislation (activity worksheet)
- Protective legislation (feedback)
- Court ordered changes (presentation)

# Federal Laws and Regulations Concerning Sex Discrimination

| | Executive Order 11246 as amended by Executive Orders 11375 and 12086 and Revised Order No. 4 | Title VII of the Civil Rights Act of 1964 as amended by the Equal Employment Opportunity Act of 1972 | Equal Pay Act of 1963 as amended by the Education Amendments of 1972 | Title IX of the Education Amendments as amended by the Bayn Amendment of 1974 (P.L. 93-568, stat. 1862) and the Education Amendments of 1976 |
|---|---|---|---|---|
| **Which institutions are covered?** | All institutions with federal contracts of over $10,000. | All institutions with 15 or more employees. | All institutions. | All institutions receiving federal monies by way of a grant, loan, or contract (other than a contract of insurance or guaranty). |
| **What is prohibited?** | Discrimination in employment (including hiring, upgrading, salaries, fringe benefits, training, and other conditions of employment) on the basis of race, color, religion, national origin, or sex. Covers all employees. | Discrimination in employment (including hiring, upgrading, salaries, fringe benefits, training, and other conditions of employment) on the basis of race, color, religion, national origin, or sex. Covers all employees. | Discrimination in salaries (including almost all fringe benefits) on the basis of sex. Covers all employees. | Discrimination against students and employees on the basis of sex. |
| **Who is exempted from coverage?** | None. | Religious institutions are exempt with respect to the employment of individuals of a particular religion or religious order (including those limited to one sex) to perform work for that institution. | None. | Certain religious institutions and military schools. |
| **Who can make a complaint?** | Individuals and/or organizations on behalf of aggrieved employee(s) or applicant(s). Organizations may also file class or pattern complaints without identifying individuals. | Individuals and/or organizations on behalf of aggrieved employee(s) or applicant(s). Organizations may also file class or pattern complaints without identification of individuals. Members of the commission may also file charges. | Individuals and/or organizations on behalf of aggrieved employee(s). Organizations may also file class or pattern complaints without identifying individuals. | Individuals and/or organizations on behalf of aggrieved party. Organizations may also file class or pattern complaints without identifying individuals. |
| **Can back pay be awarded?** | Yes. For up to two years for a nonwillful violation and three years for a willful violation. | Yes. For up to two years prior to filing charges with EEOC. | Yes. For up to two years for a nonwillful violation and three years for a willful violation. | Probably, to the extent that employees are covered. |
| **What are the Affirmative Action requirements?** | Written affirmative action plans (including numerical goals and timetables) are required of all contractors of $50,000 or more and 50 or more employees. | Affirmative action is not required unless charges have been filed, in which case it may be included in conciliation agreement or be ordered by the court. | Affirmative action, other than salary increases and back pay, is not required. | Affirmative action is not required but may be undertaken by an institution to overcome the effects of conditions which resulted in limited participation by persons of a particular sex. OCR may require remedial actions if discrimination is found. |
| **Who enforces the provisions?** | Office of Federal Contract Compliance Programs (OFCCP) of the Department of Labor. The Office for Civil Rights (OCR) in the Department of Health, Education and Welfare (HEW) conducts the reviews and investigations. | Equal Employment Opportunity Commission (EEOC). | Equal Employment Opportunity Commission (EEOC). | Federal departments and agencies which extend financial aid to educational programs and activities. HEW's Office for Civil Rights has primary enforcement powers to conduct the reviews and investigations. |

*Source: Project on the Status and Education of Women;
Association of American Colleges
1818 R Street, N.W.
Washington, D.C. 20009

## Activity Worksheet: Protective Legislation

In this activity you will check your understanding of protective employment legislation. Read the statements that follow and indicate whether each one is TRUE or FALSE by placing a check in the appropriate column.

| | TRUE | FALSE |
|---|---|---|
| 1. Before accepting apprenticeship applications, certain Federal construction contractors must direct recruitment efforts to schools with female students and women's recruitment and training organizations. | | |
| 2. Schools attended only by females and which receive Federal Aid may hire only female faculty people. | | |
| 3. An employer can discriminate on the basis of sex in jobs requiring lifting very heavy items. | | |
| 4. An employer can decide not to hire a pregnant woman because she will leave to have a child. | | |
| 5. If a business provides rest periods for women workers, it must also provide them for men. | | |
| 6. If an employer is found to have unequal wage scales for men and women, the rates can be lowered to create equality. | | |
| 7. In certain instances, an employer may inquire about the marital status of an applicant. | | |
| 8. Government contractors who have 50 or more employees and government service or supply contracts of $50,000 or more must have a written affirmative action program. | | |
| 9. Assuming experience and all other qualifications are equal, a saleswoman in a women's wear department may be paid a higher wage than a man selling men's clothing in the same store. | | |
| 10. An employer may refuse to promote a woman to another job because state laws prohibit women from performing certain strenuous physical activities. | | |
| 11. Certain jobs within a school system may be classified for "males" or "females." | | |
| 12. Since the men's tennis team plays seven extra matches and practices two times more than a school's female tennis team, the men's tennis coach can be paid more for his work than the women's coach, even though their experience is the same. | | |

**Protective Legislation (Feedback)**

**Following is a list of correct answers and references for the statements in the activity.**

1. T - Equal Employment Opportunity in Construction Regulations, April 1978, Office of Federal Contract Compliance Programs (OFCCP) of the U.S. Department of Labor. OFCCP implements executive orders.
2. F - Equal Employment Opportunity Act of 1972.
3. F - Title VII of the Civil Rights Act of 1964 (as amended).
4. F - Title VII of the Civil Rights Act of 1964 (as amended).
5. T - Title VII of the Civil Rights Act of 1964 (as amended).
6. F - Equal Pay Act of 1963.
7. F - Title VII of the Civil Rights Act of 1964 (as amended).
8. T - Executive Order 11246 (as amended by Executive Order 11375).
9. F - Equal Pay Act of 1963.
10. F - Title VII of the Civil Rights Act of 1964 (as amended).
11. F - Title VII of the Civil Rights Act of 1964 (as amended) and Title IX of the Educaiton Amendments of 1972 (as amended). There may be legal exceptions to this, such as hiring a female attendant in the girls' locker room.
12. T - Title IX of the Education Amendments of 1972.

**Court Ordered Changes (Presentation/handout)**

Read the presentation which follows to the audience. It describes several judgments made by the courts concerning affirmative action. You may decide to distribute copies of these pages to participants for their reference. There is no activity that reinforces this presentation.

The courts have required fundamental changes in all aspects of employment and have specified numbers or percentages of minorities and females to be hired, trained, or promoted in specific job categories, until certain goals are reached. The courts usually require an employer to undertake such action quickly, with follow-up monitored by the court.

Here are some recent examples of the kinds of practices ruled discriminatory by the courts, costs to the employers, and nature of affirmative action ordered:

- Anaconda Aluminum Company was ordered to pay $190,000 in back wages and court costs to 276 women who alleged that the company maintained sex-segregated job classifications. Jobs formerly classified "Female" and "Male" had been reclassified as "light" and "heavy", but women still were prevented from transferring to "heavy" jobs; after layoffs, the company hired new male employees into "heavy jobs" rather than recalling females with seniority in "light" jobs. The company was ordered to assure opportunity for all jobs to anyone who could qualify.[1]
- The Household Finance Corporation paid more than $125,000 to white-collar female employees who charged they were denied promotion because of sex. The company also agreed to hire 20% females for branch representatives positions (subject to availability) until such representatives were 20% female, and to hire 20% from specified minority groups for clerical, credit and branch representative jobs until the total employees reached 65% of their population in the labor area. HFC also agreed to train female and minority employees to help them qualify for better jobs where they were under-reprepresented.[2]
- More than 55 million dollars was found owing under the EqualPay Act* to 129,000 employees (mostly female) from 1964 through January 1973. In one case alone, Wheaton Glass Company paid more than $900,000 in back wages and interest to 2,000 female employees.[3]

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* *Adapted from Affirmative Action and Equal Employment,* Volume 1, U.S. Equal Employment Opportunity Commission, Washington, D.C., January 1974.

- **Libbey Owens Ford Company, under a consent decree, agreed to open bidding for all jobs to women, including those previously barred because of state laws requiring overtime pay and weightlifting restrictions. The company and its union agreed to start a training program to aid women employees in transferring to better jobs, to undertake specific recruitment and advertising to attract women applicants and—depending upon availability—to select two women out of the next four foremen hired in certain departments.[4]**
- **The Consolidated Coal Company, one of the nation's largest coalmining companies, agreed to pay $370,000 to women who had either been refused jobs or were denied higher paying underground jobs or were made to wait longer than men for these jobs. The company agreed to hire at least one woman out of five trainees hired.**

### *The AT&T Agreement: Important Precedent and Guide*

The extent of legally required affirmative action to remedy discrimination and effects of past discrimination is reflected in a major agreement signed by American Telephone and Telegraph Company with EEOC and the Department of Labor, after more than two years of litigation. This agreement, confirmed by a federal court consent decree, may serve both as a costly warning and as a helpful guide to other employers. Its major provisions include:[5]

- Approximately $15 million—by far the largest single back pay award ever made—in one-time payments to thousands of employees charged to have suffered from discriminatory employment practices
- An additional estimated $50,000,000 in yearly payments for promotion and wage adjustments to minority and female employees.
- Affirmative actions include:
    - —Specific hiring and promotion targets, including goals to significantly increase utilization of women and minorities in every job classification. These targets will be reviewed regularly by the EEOC and the Office of Federal Contract Compliance.
    - —Goals for employing males in previously all-female jobs.
    - —Women and minorities now in non-management non-craft jobs will be able to compete for craft jobs based on their qualifications and company seniority.
    - —Promoted employees will be paid, generally, on the basis of their length of service.
    - —All female college graduates hired since 1965 will be assessed to determine interest and potential for higher level jobs and a specific development program will prepare these women for promotions.

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**Notes**

1. *Newton* v. *Anaconda Aluminum Co.,* unreported, C.A. #6340 Sept. 17, 1969, consent decree approved July 9, 1971 U.S. Dist. Ct., Louisville, Ky., EEOC Press Release No. 71 (June 30, 1971).
2. *U.S.* v. *Household Finance Corp.*, 4 EPD para. 7680 (N.D. Ill., 1972) (Consent decree).
3. Statement of Employment Standards Administration, U.S. Department of Labor, January 20th, 1973. *Schultz* v. *Wheaton Glass Co.,* 421 F. 2d 259 (1970).
4. *U.S. v. Libbey-Owens Ford Co., Inc.*, 3 EPD para 8052 (N.D. Ohio, 1971) objections to decree overruled 3 EPD para. 8122.
5. 1 EP para. 1860 (E.D. Pa. January 18, 1973, consent decree. Full text of A.T. & T. Agreement in this source.

**Explanation of Abbreviations**

*EPG* refers to *Employment Practices Guide*, *EPD* to *Employment Practices Decisions*, published by Commerce Clearing House, 4025 West Peterson Ave. Chicago, Ill. 60646. *FEP* refers to *Fair Employment Practices Cases*, a service published by the Bureau of National Affairs, 1231-25th St., N.W. Washington, D.C. *Fair Employment Reports* is a bi-weekly newsletter published by Leonard Eiserer, P.O. Box 1067, Blair Station, Silver Spring, Md. 20910.

## SUBJECT: EMPLOYMENT STATISTICS

Actual employment statistics can stimulate discussion concerning imbalances in representation of the sexes in the work world. The important conclusions to be drawn from the statistics show an underutilization of females in the work force.

The program components include an activity worksheet for participants to check their knowledge, feedback on the questions asked, a fact sheet on employment statistics and some general conclusions for discussion. Speakers may use these materials in any order they wish. Using the activity worksheet first may stimulate greater interest in the discussion of the fact sheet and the general conclusions.

Materials include:

- Employment statistics (activity worksheet)
- Employment statistics (feedback)
- Employment statistics (fact sheet)
- Discussion conclusions (presentation)

### Activity Worksheet: Employment Statistics

Directions: Following are questions concerning pertinent employment patterns and statistics. Read each question and circle your answer. (You may then wish to compare notes with colleagues—put a square around the answer the group arrives at.)

1. In 1978, what percentage of the labor force do you feel was composed of women?
   A. 35% B. 42% C. 55% D. 65%
2. In 1975, what percentage of women workers do you think were married and living with their husbands?
   A. 42% B. 52% C. 55% D. 58%
3. What do you think is the worklife expectancy of the average male worker?
   A. 25 years B. 36 years C. 40 years D. 43 years
4. Approximately how many male workers do you feel were in clerical jobs in 1977?
   A. 3.5 million B. 5.2 million C. 8.6 million D. 10.8 million
5. What proportion of skilled craft workers do you think are women?
   A. 1 in 5 B. 1 in 10 C. 1 in 15 D. 1 in 20
6. What do you feel was the approximate median income for all women working full time in 1977?
   A. $6,900 B. $8,600 C. $9,800 D. $10,400
7. What do you feel was the approximate median income for all men working full time in 1977?
   A. $11,400 B. $13,700 C. $14,600 D. $15,900
8. Over the last twenty-five years, what do you think happened to the relationship between fully employed women's earnings and men's earnings?
   A. the earnings gap narrowed B. the earnings gap widened
   C. women's earnings rose at an equal rate in relation to men's earnings.
9. In what percentage of marriages do you think both husband and wife work? A. 36% B. 39% C. 41% D. 47%
10. What change is expected in the number of male childcare workers between 1970 and 1985?
    A. decrease by 38% C. increase by 46%
    B. decrease by 15% D. increased by 71%
11. What do you think is the percentage of women workers (ages 20 to 34) who are high school graduates?
    A. 68% B. 78% C. 85% D. 89%

12. In 1974, what do you think was the approximate median income of full time working women with four years of college?
A. $8,600 B. $9,500 C. $10,800 D. $11,600

**Employment Statistics (Feedback)**

After participants have checked their answers with the key below, move on to the Employment Statistics Fact Sheet.

1. B - 42%
2. D - 58%
3. D - 43 years
4. A - 3.5 million
5. D - 1 in 20
6. B - $8,600
7. D - $14,000
8. B - the earnings gap widened
9. D - 47%
10. D - Increase 71%
11. C - 85%
12. B - $9,500

**Employment Statistics (Fact Sheet)**

1. Nine of ten females will work at some time in their lives.
2. A declining number of women leave work for marriage and children. Among those who do leave, a majority return when their children are in school. Even with a break in employment, the average woman worker has a worklife expectancy of 25 years as compared with 43 years for the average male worker. The single woman averages 45 years in the labor force.
3. Women constituted 42% of the labor force in 1978. In 1960, less than 35% of the people in the labor force were women.
4. 40% of women age 16 and over are in the labor force.
5. One of seven families is headed by a woman.
6. In 1975 married women (husband present) accounted for nearly 58% of all women workers.
7. More than four of ten married women aged 25 to 34 were workers in March 1975. In 1965, the comparable figure was three of ten; and in 1950, two of ten women in this group worked.
8. According to a 1976 study by the Department of Labor, nearly 46% of the children under 18 in the United States had mothers in the labor force, up from 39% in 1970. Among pre-school age children, the proportion whose mothers worked or looked for work rose from 25% to 37% between 1970 and 1976.
9. Nearly 3.5 million men held clerical jobs in 1977; while 18 million women held clerical jobs.
10. It is predicted that males, who constituted 6.8% of the childcare workers in 1970, would constitute 11.6% of this group in 1985, a 71% increase.
11. Approximately 35% of all employed women were in clerical jobs in 1975. These included more than four million secretaries, stenographers, and typists.
12. One of seven women workers is employed in a blue collar job, while 50% of working men are in such jobs.
13. One of five men are skilled craft workers, while 5% of all skilled craft workers are women.
14. About 20% of union members are women.
15. 85% of young women workers, between the ages of 20 and 34, are indeed high school graduates. More than one out of four of all women in the labor force have completed one or more years of college and one out of eight was a college graduate in 1973.

16. In 1976, women with bachelors' degrees earned higher starting salaries than men in the following fields: accounting, computer science, and most engineering fields. In most other fields, men's starting salaries were higher.

17. In 1977, approximately 217,000 women earned $25,000 or more. In 1970, 25,000 women earned $25,000 a year.

18. The median income for all women working full-time in 1977 was $8,618, compared to $14,626 for men, or 58.9% of the men's income. In 1955, fully employed women's earnings were 63.9% of men's earnings; in 1970 they were 59%.

19. The median income of working women with four years of college is actually less than that of men who have completed only eight years of elementary school. In 1974, full-time working women with four years of college earned $9,523; men with only eight years of elementary school earned $9,891.

20. Husband and wife both work in somewhat more than 47% of the nation's marriages.

### Discussion Conclusions (Presentation)

With more women in the labor force, a larger pool of people with skills and abilities is available to employers.

Women work for the same reasons men do, most importantly, to provide for the welfare of themselves, their families, or others.

Despite their increasing numbers, women still occupy a disproportionate percentage of low-paying, dead-end jobs. Many women are still not being prepared to enter fields that offer opportunities for higher pay and more status.

Although many women have the necessary aptitudes and potential skills (evidenced by their performance in industrial jobs during World War II), the skilled trades today are still dominated by men.

While the median income for women has increased dramatically over the last 25 years, men's earnings over the same period rose at a faster rate.

## SUBJECT: CHANGING ROLES OF MEN AND WOMEN

Certain stereotypes and myths about the roles of men and women need to be questioned if equal employment is to become a reality. This section is designed to help participants become more aware of their own attitudes towards traditional sex roles.

The program components include a brief discussion of changing roles that may be presented by the speaker, an activity worksheet to be filled in by participants individually and/or in small groups, and the "answers" to the questionnaire in a feedback format. Speakers may use these materials in any order they wish.

Materials include:

- Changing roles for females and males (presentation)
- Female and male roles (activity/worksheet)
- Female and male roles (feedback)

### Changing Roles for Females and Males (Presentation)

In the past, our perceptions of females and males have been governed by many traditional stereotypes, including the notions that women stay at home take care of domestic and family responsibilities, and accept these roles as their lot in life. On the other hand, men are aggressive, responsible for the economic well-being of their families, and have a much stronger career orientation.

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If we examine these stereotypes, we may recognize some of the characteristics that traditionally have been labeled "female" and "male." First, the word "home," has traditionally female connotations. The woman is the homemaker; her sphere of useful activity is limited to the home. Next, she is a "domestic" who takes care of "family responsibilities." She is the mother, the wife, the helper.

Men, however, possess different traits than women. According to our stereotypes, men must be "aggressive"; men must struggle with unknown forces. As a result, men live in a world of experience. A man who is "responsible" is one who has a duty or an obligation. Male obligation, of course, is "economic". Men work, earn money to support their families, and dedicate themselves to the family's "well-being".

Although men have had a cultural bias in their favor which has helped them gain greater power and authority, they too have had certain roles. Men have had to accept the role of "breadwinner" or be accused of being lazy and unmanly. Cultural norms have directed men towards "achievement." If achievement is not realized, men frequently feel they are inadequate.

Today, however, society has learned that men and women do not have to assume rigid roles. It is surely not "unmanly," for instance, for a man to prepare meals, clean the house, and prepare the children for school. It is not unfeminine for a woman to resolutely pursue a career and make a considerable financial contribution to a marriage. As women shift from homemaking to careers and carry a greater share of the economic burden, greater numbers of men must assume an increased responsibility for domestic tasks.

There are several other effects of women working:

1. Child rearing, once a female role and a limited part-time male responsibility, is no longer that way. Fathers, of course, are taking more responsibility for rearing children, and outsiders are becoming more important as surrogates. Day care and child care centers are making it easier for both parents to be gainfully employed while children receive appropriate care and guidance.

   Some psychologists and sociologists claim that this changing family situation may affect the emotional development of today's youth. They claim that changing sex roles may confuse maturing children. They are also concerned that day care and child care centers and the dependence upon them will lessen parental influence over the growth and development of their children.

   Other psychologists and sociologists claim that active parents represent more positive images of adulthood than do bored, disinterested parents. They feel that the amount of time spent with children is less critical than the way that time is used. Seeing that family time is well spent means greater responsibility for both mother and father.

2. Changing roles also may have an effect on the divorce rate. While there are certainly many factors involved in the rising divorce rate, researchers believe that the growing numbers of working women is one relevant factor. As women become more financially independent, they may not feel bound to remain in an unpleasant marriage.

3. Changing lifestyles are influencing marriage and birth patterns. As employment opportunities expand for women, they tend to postpone marriage and, in a growing number of instances, to reject it entirely. Increased employment responsibilities contributes to this trend, as does a greater sense of freedom resulting from higher income.

   Likewise, many working couples do not want to lose their financial and social independence by having children. Others decide to put off having children until they feel financially settled. These changing attitudes are contributing to a realignment of traditional sex roles.

Although society is slowly accepting these changing roles, many of the old stereotypes remain with us. Nevertheless, we are making progress towards a society without sex bias. To make even further progress, we need to see ourselves and others without preconceived stereotypes, or, at least, become more aware of the stereotypes we do hold. We need to be aware that freedom must exist for both sexes to develop their skills and talents and to recognize that broader individual human rights will mean greater freedom for all.

### Activity Worksheet: Female and Male Roles

Directions: Following are several statements designed to help you clarify your views on the various roles of men and women. Read each statement and then indicate the strength of your agreement or disagreement by circling numbers 1, 2, 3, 4 or 5. (You may then wish to compare notes with colleagues—put a square around the number that represents group consensus for each statement.)

| | AGREE | | | | DISAGREE |
|---|---|---|---|---|---|
| 1. Although women may say that they want careers, their primary interest is to become wives and mothers. | 1 | 2 | 3 | 4 | 5 |
| 2. Although women can be socialized to be competitive in the business world, this is contrary to their tendency to be gentle and nurturing. | 1 | 2 | 3 | 4 | 5 |
| 3. Since most women are subject to mood swings and can become emotional and excitable, at least part of the month, they should not hold positions that require stable judgment. | 1 | 2 | 3 | 4 | 5 |
| 4. Due to the fact that men do better than women in scientific subjects, it would be a disservice to encourage women to pursue careers in this area. | 1 | 2 | 3 | 4 | 5 |
| 5. Assertive women alienate their co-workers, bosses, and teachers. Therefore, it is important for counselors not to provide encouragement for outspoken behavior in female students. | 1 | 2 | 3 | 4 | 5 |
| 6. In the long run, since men are heads of households, women who work are taking income away from other families. | 1 | 2 | 3 | 4 | 5 |
| 7. While one may legislate sex equity principles, the actual practices lag so far behind the rulings that it would be a disservice to encourage women to train for non-traditional careers. | 1 | 2 | 3 | 4 | 5 |
| 8. A married man's chief responsibility should be to his job. | 1 | 2 | 3 | 4 | 5 |
| 9. Pre-school children suffer if their mothers work. | 1 | 2 | 3 | 4 | 5 |
| 10. If a young, single woman is doing exactly the same kind of work as a married man with children, she should receive the same rate of pay. | 1 | 2 | 3 | 4 | 5 |
| 11. If a woman is not satisfied with being a wife and mother, it is a sign she has emotional difficulties. | 1 | 2 | 3 | 4 | 5 |
| 12. A working wife will become too independent. | 1 | 2 | 3 | 4 | 5 |
| 13. Women with young children should not take jobs unless there is financial need. | 1 | 2 | 3 | 4 | 5 |

## Female and Male Roles (Feedback)

The activity/worksheet was designed to help participants clarify their own views of the traditional sex roles. In discussions of their views and in presenting the feedback, it is important to stress that even if an individual subscribes to some of these stereotyped beliefs about men and women in general, employment policies should not be based on concepts about large numbers of people, but on each person's special characteristics.

1. **ALTHOUGH WOMEN MAY SAY THAT THEY WANT CAREERS, THEIR PRIMARY INTEREST IS TO BECOME WIVES AND MOTHERS.**

   The implications of this statement are twofold. First, a woman does not need to choose between having a family and a career. Secondly men may also wish to be husbands and fathers. This does not mean that they cannot be successful at some other endeavor.

2. **ALTHOUGH WOMEN CAN BE SOCIALIZED TO BE COMPETITIVE IN THE BUSINESS WORLD, THIS IS CONTRARY TO THEIR TENDENCY TO BE GENTLE AND NURTURING.**

   The emphasis here is on learning competitive behavior as opposed to the almost biological traits of nurturance. It may be that both characteristics are somewhat natural in men and women and are influenced by the socialization process. Thus, men and women can be trained to be gentle when that type of behavior is appropriate and to be competitive in competitive situations.

3. **SINCE MOST WOMEN ARE SUBJECT TO MOOD SWINGS AND CAN BECOME EMOTIONAL AND EXCITABLE, AT LEAST PART OF THE MONTH, THEY SHOULD NOT HOLD POSITIONS THAT REQUIRE STABLE JUDGMENT.**

   There are several ways to analyze this statement. The belief may come from complaints of women that they are incapable of doing certain things during the pre-menstrual phase (a few days prior to the menses) of the monthly cycle. These complaints come more often from women who have "dead-end" jobs or are homemakers trying to get some rest. Women in executive positions do not ask for special consideration due to their menstrual cycle. Moreover, there is no evidence to support the contention that the influence of the menstrual cycle is stronger than other pressures on the decision making process.

4. **DUE TO THE FACT THAT MEN DO BETTER THAN WOMEN IN SCIENTIFIC SUBJECTS, IT WOULD BE A DISSERVICE TO ENCOURAGE WOMEN TO PURSUE CAREERS IN THIS AREA.**

   The achievement test results of children in the elementary grades generally demonstrate that there is no difference in performance between boys and girls at this level. At the secondry school level, however, mean differences favor men over the women. Since the two groups are the same in the lower grades, it is possible that the socialization process has already discouraged women from thinking about careers in scientific areas. Thus, women may need to be encouraged at earlier ages. There are many more women in the sciences and engineering today than there were only a few years ago.

5. **ASSERTIVE WOMEN ALIENATE THEIR CO-WORKERS, BOSSES AND TEACHERS; THEREFORE IT IS IMPORTANT FOR COUNSELORS NOT TO PROVIDE ENCOURAGEMENT FOR OUTSPOKEN BEHAVIOR IN FEMALE STUDENTS.**

   Some assertiveness training may engender feelings of antagonism in some people. On the other hand, it has taken a while for peope to get used to seeing women in leadership roles. It is only in recent years that women have appeared as television newcasters or judges in courts that do not deal with juveniles. As more women take more directive positions and perform successfully in them, the novelty will diminish and people will focus on the person's ability to achieve goals and not on the person's sex.

6. **IN THE LONG RUN, SINCE MEN ARE HEADS OF HOUSEHOLDS, WOMEN WHO WORK ARE TAKING INCOME AWAY FROM OTHER FAMILIES.**

   The most recent Labor Department statistics indicate that almost half of the women who are employed are either heads of households or contribute to the maintenance of indigent families. It is also quite likely that sometime in a woman's life she will indeed need to support at least herself and perhaps other dependents. It is not simple to assume a career at a moment's notice without years of preparation or current experience.

7. **WHILE ONE MAY LEGISLATE SEX EQUITY PRINCIPLES, THE ACTUAL PRACTICES LAG SO FAR BEHIND THE RULINGS THAT IT WOULD BE A DISSERVICE TO ENCOURAGE WOMEN TO TRAIN FOR NONTRADITIONAL CAREERS.**

While there are differences in the rate of progress being made in various formerly male-dominated and female-dominated fields, vast strides are being made in providing new opportunities for both men and women.

8. **A MARRIED MAN'S CHIEF RESPONSIBILITY SHOULD BE TO HIS JOB.**

Each person has many responsibilities, the priorities of which are constantly being rearranged. Maintaining a good economic position is important to anyone, just as are maintaining family relationships and friendship patterns. Sometimes the conflicts are very difficult to resolve, but decisions on the order of priorities cannot be made using generalizations.

9. **PRE-SCHOOL CHILDREN SUFFER IF THEIR MOTHERS WORK.**

Pre-school children may suffer if caretaking is inadequate. Competent and loving care must be given to young children in order for them to develop healthy personalities in the future. The caretaker need not be a full-time mother. The key is finding caretakers or day-care centers that can provide competent support for the child.

10. **IF A YOUNG, SINGLE WOMAN IS DOING EXACTLY THE SAME KIND OF WORK AS A MARRIED MAN WITH CHILDREN, SHE SHOULD RECEIVE THE SAME RATE OF PAY.**

It is the job description that should determine the salary of any person who holds a particular position. If a person is asked during a job interview how much money is needed. It would be appropriate to focus on the salary the job deserves.

11. **IF A WOMAN IS NOT SATISFIED BEING A WIFE AND MOTHER, IT IS A SIGN THAT SHE HAS EMOTIONAL DIFFICULTIES.**

For many years, some therapists have implied that career women were denying their basic tendencies and needs and were, therefore, neurotic.

As more and more women enter the job market, the implication of "abnormality" or emotional instability can no longer be applied. Even if a woman spends a portion of her life in "mothering" activities, she will have a considerable number of productive years during which she will have minimal home responsibilities. Moreover, not every woman is interested in being a wife or mother, just as not every man is oriented toward marriage or fatherhood.

12. **A WORKING WIFE WILL BECOME TOO INDEPENDENT.**

This particular statement was purposely left rather ambiguous. There are usually two directions that the discussion of this statement takes. Some people probably focused on the financial aspects of independence and some on the emotional and perhaps sexual aspects.

Many people feel that women are inherently dependent and that that status enables them to accept secondary roles, often subordinating their own interests and aspirations to those of the signficant others in their lives (e.g., husbands, parents, children).

The traditional role of housewife, as established in the past, has reinforced this type of behavior. Presently, however, the views on the "natural" role of women have altered. The concepts of equal partnerships in relationships, the emphasis on self-actualization and the need for the financial contribution of the woman will facilitate a change in this orientation. People will be able to remain together because that is their desire, not because one is dependent on the other.

13. **WOMEN WITH YOUNG CHILDREN SHOULD NOT TAKE JOBS UNLESS THERE IS FINANCIAL NEED.**

The implications of this statement are that the childrn will suffer some physical or psychological neglect if mothers work, and the only justification for working is *immediate* financial need.

There is no evidence that the absence of the mother, when there is an adequate surrogate,is a single determinant of behavior problems in children. In fact, many of today's battered children have a full-time mother. Moreover, if the mother gain self-esteem from other source, she may not use her children for gratification.

The second issue concerns financial need. Women who are currently categorized as middle class may become listed on the welfare rolls quickly due to divorce or widowhood. As a result, those women who have not maintained their work skills will find themselves at a considerable disadvantage.

## SUBJECT: CHANGES IN EMPLOYMENT PATTERNS

There are many ways to attain full sex fairness in employment. Many organizations are presently helping people to develop skills needed to enter non-traditional jobs.

The major program component in this section is a series of brief descriptions of job training and placement programs supported by government funding, non-profit organizations, unions, and profit-making schools and businesses. The descriptions may be presented to the group by the speaker and/or given to the group as a handout.

Materials include:

- Major job training and placement programs (presentation)
- Additional approaches supporting non-traditional job placement (presentation)

## Major Job Training and Placement Programs (Presentation)

### BETTER JOBS FOR WOMEN - DENVER, COLORADO

This unique program was developed by the Bureau of Apprenticeship and Training of the U.S. Department of Labor, and is operated by the YWCA of Metropolitan Denver. The project places women into apprenticeship programs or other on-the-job training positions.

Since the program began in March 1971, women have been placed in a variety of non-traditional occupations such as carpenter, cement mason, electrician, operating engineer, painter, plumber, roofer, steel fabricator; also as business machine repairer, forklift operator, injection molder, mechanic, telephone installer, and tool and die maker.

### WOMEN IN APPRENTICESHIP - MADISON, WISCONSIN

The Division of Apprenticeship and Training of the Wisconsin Department of Industry, Labor, and Human Relations and the University of Wisconsin Extension conducted a 3-year (July 1970-June 1973) research and demonstration project on women in apprenticeship. The purpose of the project was to "isolate, analyze, and minimize barriers to the participation of women in the skilled trades." Women were employed as lithographer, camera operator, sign painter, television repairer, newspaper printer, meat cutter, second class engineer, and die maker.

### WAGES (Women and Girls' Employment Enabling Service)—MEMPHIS, TENNESSEE

Sponsored by the Memphis and Shelby County Health and Welfare Planning Council, this pilot project was established in June 1972 to develop new areas of employment for women. The project has developed a skills inventory of women with different kinds of abilities.

As a result of this project, women were placed in maintenance repair, in the U.S. Postal Service as security guards, and in production work with certain companies which may lead to forklift operator and other skilled jobs.

## FEMALE JOB PLACEMENT PROGRAM (FEJOB)—CHATTANOOGA, TENESSEE

This experimental project was started in the summer of 1971 to increase both the job options and the pay of disadvantaged women who were heads of households in the Model Cities neighborhood.

With the help of FEJOB, women are psychologically motivated and physically conditioned to perform in jobs formerly thought of as men's. Women are earning good wages as forklift operator, spray painter, welder, bench press operator, metal plate polisher, and wood turning lathe operator.

## ADVOCATES FOR WOMEN—SAN FRANCISCO, CALIFORNIA

This nonprofit organization is operating the first apprenticeship outreach program for women on the West Coast. The intent of the program is to place women in such apprenticeship jobs as carpenter, electrician, machinist, and dental technician.

## APPRENTICESHIP OUTREACH PROGRAM FOR WOMEN

In April 1974 the Manpower Administration amended three of its apprenticeship outreach contracts to provide new opportunities for women. The Apprenticeship Outreach Program places special emphasis on recruiting young women, who will be given the necessary counseling and tutoring to prepare them to enter all apprenticeable occupations.

## Additional Approaches Supporting Non-Traditional Job Placement (Presentation)

A number of other organizations are also working to increase the number of skilled jobs and to provide training opportunities for girls and women.

- The National Association of Women in Construction (NAWIC) is now offering scholarships to students (girls and boys) who plan to enter a field of study directly related to the construction industry.
- Women in Technical Trades and Professions, Berkeley, California, was formed early in 1970 by feminists concerned with opening blue-collar job opportunites to women.
- Lady Carpenter Institute of Building and Home Improvement, Inc., in New York City, has graduated women of all ethnic backgrounds and ages. The Institute serves as a bridge between experience already gained at home and professional job placement in carpentry and cabinet making by affording educational opportunities for development of skills and competence.
- Project Repair in San Diego, California, began a pilot program in the summer of 1973 to develop skills competency for young women 14 to 18 years of age in home repair related markets such as appliance and TV repair.
- The American Association of Women Truck Drivers, Charter Oak, California, was formed several years ago to assist in or to get training for self-supporting women desiring employment as truck drivers and to eliminate discrimination against them on the basis of sex.
- The International Longshoremen's Association has hired 750 new dockworkers for the Port of New York and New Jersey; included in the group are 100 women.
- Women in Mining, with chapters in Denver and Tucson, sponsors scholarships for women to attend the Colorado School of Mines, one of the finest mining colleges in the country.
- American Telephone & Telegraph, required by a court order to employ people in non-traditional jobs, in May 1979, reported that 12.3% of the company's secretaries, or 13,200 employees, are men. The percentage of male scretaries at AT&T in 1972 was 5.8%

# APPENDIX D

## RECRUITMENT PROGRAMS

Activities aimed at (potential) students should include both awareness raising and affirmative career education. A brief sketch of one possible approach to affirmative career education is given below. Following that is a detailed description of a vocational exploration program offered at Lane Community College in Eugene, Oregon, parts of which may be replicable here. (From Jeannette D. Wheeler et al., *Case Studies and Promising Approaches, Vocational Education Equity Study, Final Report, Volume III.*, Palo Alto: American Institutes for Research, 1979) Consider also the Honolulu Community College Industrial Orientation course.

Course Outline: World of Work/Vocational Exploration
3 credits

1. World of Work—5 weeks
   a. The job market in Hawaii: Demand areas—current and projected
   b. The employer's interest: Productivity; work ethic
   c. The worker's interest
      i. Protection of civil rights: Discrimination, equity, affirmative action; federal programs; role of labor unions (grievance procedures)
      ii. Job satisfaction
   d. Politics of work: Job stereotyping—by sex, ethnic group, handicap

2. Vocational Program Exploration—7 weeks
   (One week for each of the programs: Metal working; Automotive; Electricity; Refrigeration; Engineering tech.; Secretarial science; Nursing)
   a. What the job involves: Pay; benefits; stress; rewards; working conditions; job opportunities; training requirements (1 hour)
   b. Hands-on orientation (2 hour)

3. Planning Your Worklife—2 weeks
   a. How to prepare a resume of your interests and experience
   b. Job search
      i. Employment services; Career Kokua
      ii. Interview techniques

(Instructors: Team of social science and vocational education instructors; reading materials will be discussed in a later report.)

A shorter program focusing only on trades and industries may be derived from this model (see also Kenneth Kameoka, Tetsuya Murayama, and Barbara Speetjens, "Report on Sex Equity Project," Hilo: Hawaii Community College, 1981(?)). Workshops on sex bias and stereotyping for student may be adapted from the model developed for faculty (see Appendix E).

## INDUSTRIAL ORIENTATION

### Eugene, Oregon

## PROGRAM OVERVIEW

One woman enters the all male atmosphere of an automobile mechanics program and finds the first day that she is "years behind" the other students in skills. Another woman, a single mother, wants one of the higher-paying, nontraditional (for women) jobs to support her family, but does not know what she really might be able to do. Another lacks the self-confidence and technical "know-how" to work in an industrial job.

These and other women like them are gaining the skills and confidence they need to pursue nontraditional careers in a course called Industrial Orientation offered at Lane Community College in Eugene, Oregon. Industrial Orientation, supported by federal vocational education funds through the Oregon State Department of Education, provides "hands-on" experience in eight different vocational areas: drafting, mechanics, woodshop, electronics, blueprint reading, machine shop, construction, and welding. Students learn the use of tools, equipment, and materials of each occupation in typical job projects. They also learn about the world of work in industrial settings and address the issues of psychological and physical preparedness for nontraditional employment.

The Industrial Orientation program is not designed to provide entry-level vocational skills. Rather it is pre-vocational and exploratory, allowing those who lack even basic familiarity with the terminology, tools, and skills of many trades to acquire such familiarity. Nor is the program exclusively female, although most enrollees are, in fact, women. It is modular in nature, allowing students at the community college to explore whatever specific topics interest them. They receive in turn one hour of credit for each 12-hour module completed. While the course leads some of the enrollees into vocational programs at the college, for others it simply provides a new appreciation of the trades involved, and perhaps an increased ability to work on their car, repair their appliances, or remodel their homes.

The following comments of women students and "graduates" of Industrial Orientation typify the feelings of many:

> "I had registered for a regular automotive technology class but I 'chickened out'...I needed to get my feet wet. Now I'm majoring in automotive technology thanks to Industrial Orientation."
>
> "I am a recent divorcee and realized secretarial work wouldn't do it. I needed to get paid more."
>
> "I gained some real survival skills...there's more things I can do myself. I work on my own car and can do tune-ups and brake work."
>
> "I was going to take secretarial classes...more secure. But now I'm in the Machine Shop and Drafting Modules. I think I'm going to major in drafting."
>
> "It occurred to me in class that I could work for myself, work on other people's cars. In no other classes have they pushed me toward working for myself, being independent."

## PROGRAM BACKGROUND AND DEVELOPMENT

The roots from which the Industrial Orientation course developed grew from seeds sown in September 1974. At that time, the mutual interests of a Lane Community College (LCC) counselor and the college's Community Relations Specialist resulted in a workshop for the community entitled, "There's a Woman in the Men's Room." This title derived from the fact that there were no women's restrooms in seven of the major vocational shop areas on campus, an issue which became a symbol of obtaining equal opportunity for women at LCC. While the restroom problem was finally resolved in the Spring of 1978, the 1974 workshop was intended to assess the college's and community's interest in the issues of sex equity and nontraditional vocational training for women. This interest was dramatically demonstrated when over 350 people attended the workshop.

Due to the impetus of this workshop, the Dean of Instruction agreed to the formation of a community advisory committee to advise the college about future needs and directions related to sex equity and special programming for women. This Women's Program Advisory Committee of over 25 members represents the viewpoints of business, labor, industry, the professions, the schools, community agencies, women's organizations, and the community at large. Informational meetings began, and the first formal step toward a program came the following spring, when the Community Relations Specialist was allowed to use 40% of her time to provide staff development and awareness training related to sex equity and women's educational needs. Efforts were focused on LCC staff inservice workshops on sex role stereotyping and on formally convening the newly approved Women's Program Advisory Committee.

The 1975-76 school year was an experimental one during which, among other things, a Women's Program office (later the Women's Center) was established, plans for future services were generated, staff development activities were designed to develop awareness and skills for providing nonsexist education, and a position paper based on the year's experiences was submitted. This paper included recommendations for institutional action. As a result, a full-time Women's Program Coordinator, who had faculty status and reported directly to the Dean of Students, was hired at the beginning of the 1976-77 school year.

At this time the basic philosophy of a Women's Program "network," of which Industrial Orientation is only one part, was made explicit. This network is based on the following operational premise: rather than offering isolated women's studies classes, counseling, upward mobility seminars, women's workshops, nontraditional job placement, and other such offerings out of the Women's Program Office, as is done in many other institutions, the Coordinator's efforts at LCC would be focused on staff development to help all college personnel identify, plan, and implement changes and additions necessary in their own areas. This would allow needed services and classes to be established and sustained within already existing departments.

Women's Program staff members feel that the major disadvantage of this approach is that it may take longer to get services and classes functioning effectively than it would through a special Women's Programming Department. However, the advantages are that expensive duplication can be avoided and every area of the college can be affected. The classes and services will not become isolated by being clustered in a single department. Furthermore, staff members feel that a great deal of increased awareness will occur simply as a result of collaborating to design, implement, and sustain these activities.

Some examples of network activities already underway include: returning women's workshops, assertiveness training, and nontraditional career planning classes in the Counseling Department; Women's Studies classes in the Social Science Department; a task force for women in management in the Business Department; an advisor and class to deal with "math anxiety" in the Math Department; Title IX Self-Evaluation in the Office of Research and Planning; and a project during 1977-78 to provide personnel data for Title IX and Affirmative Action purposes in the Office of Business Operations. Of course, the Industrial Orientation class, which affects several industrial vocational departments, is part of this network and both shares its resources and contributes to its pervasiveness.

## Industrial Orientation

As the Women's Program was developing and exploring issues, it was soon discovered that only a sprinkling of women had ever enrolled in various "men's" programs over the years at LCC. Of those that did enroll, even fewer graduated. Of the more than 40 vocational programs offered by the college, women students were clustered in only 12 programs, many of which trained women for lower-paying, non-technical, non-managerial, service-oriented occupations such as secretarial science, legal assistant, early childhood education, and nursing. It was clear to Women's Program staff that women needed to expand their career options.

During the 1976-1977 school year a Task Force on Nontraditional Training Programs for Women was formed to address the issue. The Task Force included the LCC Director of Vocational Education/Special Training Programs, several counselors, the Women's Program Coordinator, department heads of electronics and mechanics, and a nontraditional female student. They proposed a hands-on career exploration class wherein women could sample a number of vocations to permit a more knowledgeable career decision. The result was the Industrial Orientation Workshop, which was first offered in the spring term of 1977 on a pilot basis. It is now offered every term as a regular pre-vocational class. Initially the Coordinator of Industrial Orientation was paid on a part-time basis to coordinate that class. Since then, however, a vocational education grant from the Oregon State Department of (Vocational) Education has made it possible to hire a person full-time to coordinate the class as well as to facilitate other activities to increase enrollment and success of students in nontraditional programs.

The Industrial Orientation class has as one objective moving more women into the skilled trades. It is designed to help those people who lack even elementary awareness of the required mechanical and technical skills for those trades. Individuals who have never built a treehouse or go-cart, tinkered with old radios, designed erector set models, worked on cars, or taken shop or drafting classes often lack basic mechanical skills and consequently do not consider skilled trades as available options for themselves.

## PROGRAM DESCRIPTION

### Target Population

The student body of Lane Community College is approximately 96% Caucasian, 80% first-year students, 65% single, 52% female, and the average age is approximately 27. The low-tuition college serves a 5,000 square mile area with a population of approximately 250,000. Industrial Orientation is available to any student at LCC. It is aimed at the student who lacks first-hand knowledge of skilled blue collar occupations. It is especially useful for women (who comprise about 80% of the enrollees) interested in looking beyond the traditional clerical or service occupations. During the fall term of 1978, two sections of Industrial Orientation were offered. The added second section was offered in the evenings in order to reach a larger target population, including those students working during the day.

### Program Staff

The person directly responsible for Industrial Orientation is the Associate Coordinator of Women's Programs, who has faculty status. She is supervised by the Women's Program Coordinator although the actual coordination of Industrial Orientation is also supervised by the Director of Special Training Programs. The Industrial Orientation Coordinator teaches the Industrial Environments module, hires expert instructors for the other eight modules, coordinates the instructor in-service training, obtains the materials, equipment and laboratory space for student use, manages enrollment and grade reports, and maintains continuous contact with students throughout the term. She also acts as a liaison and nontraditional training "advocate" with various college and community groups, including Student Personnel Services, Academic and College Planning, College/Community Relations, Cooperative Work Experience, Student Employment Service, and local schools, employers, and apprenticeship programs. Her job description also includes the following two goals: (1) to initiate activities designed to result in a balanced ratio of female and male instructors in vocational programs at LCC, and (2) to assist in securing additional funding to implement the goals of the program.

The other essential staff position for Industrial Orientation is that of instructor. Instructors are selected from both within the college's vocational departments and from industry , based on ability to teach the basic, pre-vocational skills, and ability to be an unbiased role model for women students. In-service training for new instructors facilitates instruction and continuity within the course. The program has had women instructors in woodworking, blueprint reading, and welding Women assistants have served in mechanics, woodworking, welding and construction.

Instructor aides, usually second year students in technical-vocational training programs, assist the students by providing additional individualized attention in several modules. One "graduate" of Industrial Orientation, a female drafting student, is teaching the evening drafting module for the fall term of 1978.

The Coordinator of Industrial Orientation feels that teacher characteristics are critical to the course's success. She seeks technically qualified instructors who are committed to educational equity and who are sensitive to the needs of women in nontraditional careers.

### Program Facilities

Office and classroom space for the Industrial Orientation program is provided by the college. All tools, machinery, and facilities are shared with the regular vocational training departments. The Industrial Orientation budget is able to provide minimal funds for consumable supplies, some small tools, and certain materials (lumber, metal) used directly in the classes.

### Program Activities

*Recruiting.* Many recruiting tools and strategies are used to attract students for Industrial Orientation. These include newspaper articles, Radio/TV spots, brochures, flyers, and posters. Information is distributed to Food Stamp Centers, the Unemployment Office, welfare agencies, utility companies, laundromats, and other locations on a community "poster route." Workshops, Career Fairs, and visitations to high schools are conducted. A color slide/tape presentation has been developed. The College/Community Relations Office and the Women's Center lend support to the publicity efforts of Industrial Orientation.

Referrals of students to the Industrial Orientation program are garnered from regular vocational instructors, from Women's Studies classes, and from other related classes such as Career Planning, Life Management, and Coping Skills. The Apprenticeship Information Center in Eugene refers students to Industrial Orientation and other vocational training programs. LCC's counseling department is most supportive, especially for undecided students needing to explore technical-vocational careers. Word-of-mouth, especially via former students, has proven to be an effective recruiting tool as well.

*Instructional program.* The Industrial Orientation course is composed of the following nine modules:

Drafting
Mechanics
Woodshop
Electronics
Blueprint Reading
Machine Shop
Construction
Welding
Industrial Environments

Each module lasts for two weeks and consumes 12 hours of class time. In the day section a student takes two modules concurrently. Classes meet Monday, Wednesday, and Friday afternoons for four hours, two hours for each module. The evening section takes twice as long to complete because modules are taken only one at a time. Evening classes meet two evenings a week for three hours per evening.

The entire Industrial Orientation course offers ten credits, one credit for each 12-hour module (the Construction module is four weeks long and is equivalent to two regular modules). A student may take one, all, or any number of modules for variable credits, depending on her interests and needs. Because it is an experiential class, credit is given on a pass/no pass basis only. This alleviates much of the anxiety some students feel as they try new skills. There are no homework assignments or tests. For credit, active attendance is required for at least eight of each module's twelve hours of class time. The cost to students is $10.90 per credit hour.

Industrial Orientation teaches students the terminology, tools, equipment, materials, work setting and environment, job salaries and benefits, safety, and training requirements of jobs in all eight industrial areas, plus many general points of interest in the ninth module, Industrial Environments. Central to Industrial Orientation's goal is the active, hands-on participation of students on job activities. From their experiences, students learn more than the routine job tasks. They learn basic skills, how the work feels, how their own abilities and interests can be developed into marketable skills. Students begin to actively and realistically consider the possibility of themselves as skilled workers. Just as importantly, some students also may learn that certain skilled trades areas do not match their interests and abilities.

To the extent possible, the curriculum of the course is planned to optimize continuity and to demonstrate the interrelationships of the various industries and industrial skills for students. For example, in the Drafting module students draw plans for projects they will construct in the Woodshop, Machine Shop, and Construction Modules. In Blueprint Reading, students construct models from cardboard and other materials from the plans they draw in Drafting. Each module strives toward the completion of an actual "product" which the student can take from the module. Past projects have included screwdrivers, nightstands, drill gauges, bookcases, and a 6 x 12 foot lumber shed. Students also help on a large house-building project of a regular construction technology class.

In the Industrial Environments orientation module, taught by the Program Coordinator, students take field trips to industrial shops, sometimes working briefly with employees. They also learn about apprenticeships, about the physical and other requirements of work in industrial settings, about employer expectations, and about career limitations that may be imposed by the lack of math skills. Guest speakers and group discussions are used to pose possible problems and to suggest solutions to problems that may be encountered on the job. Women in industrial careers or in vocational training programs are used as role models whenever possible.

One student described an enlightening field trip to a local cabinetmaking shop. As it turned out, the employer was quite hostile with respect to women workers. He was reported to have said words to the effect, "We're not hiring women. They can't do these jobs." The student felt the experience was valuable for showing this "bad" side of the real world. She also claimed that her incentive and motivation for pursuing a nontraditional career had consequently been strengthened.

*Support services.* Industrial Orientation itself provides no special support services for students, although the Coordinator provides individual support whenever possible. In addition, students in Industrial Orientation may avail themselves of the plethora of social, health, recreational, counseling, and other services offered to all students at LCC. Also, as part of the Women's Program network described earlier, Industrial Orientation students can utilize the specialized services of the Women's Center and other components of the network. In addition, articulation is maintained between Industrial Orientation and LCC's regular vocational training programs so that students may easily pursue formal, long-term training in the areas of their choice.

*Job development and placement.* While it is possible that Industrial Orientation "graduates" could go directly into some skilled trade areas, the course is not designed to provide entry-level skills to students. The course is prevocational and exploratory. For this reason job development and placement is not addressed directly by the program. As with other support services of the college, Industrial Orientation students may use the services of the Student Placement Office and the Cooperative Work Experience program.

**Costs and Funding Sources**

The basic support for the Industrial Orientation program is provided by the Oregon State Department of Education from federal vocational education funds. This $17,000 grant covers the salary of the full-time Coordinator for the Industrial Orientation program. All other costs of the program—including, most importantly, instructor salaries—are borne by Lane Community College.

The Director of Special Training, who oversees and administers Industrial Orientation, says that he has had to "carve out" monies from regular programming to support instructor costs. While he recognizes the value of Industrial Orientation, he makes it clear that additional sources of funding must be explored in order for the program to continue. The program staff has done this by writing proposals to various agencies including the County CETA Agency and the Department of Labor which build on the strengths of the Industrial Orientation program and allow it to continue and expand.

## PROGRAM EFFECTIVENESS

There does not exist a great deal of statistical information regarding Industrial Orientation's effectiveness or success. While some counts of enrollments and attrition are available, it is not possible to make a meaningful statistical evaluation, nor even clear this is appropriate for such a program. Most information regarding the effectiveness of Industrial Orientation is in the form of subjective reports of attitudinal change on the part of college administrators, instructors, students, employers, and other community members.

It must also be remembered that students take Industrial Orientation for many different, equally valid reasons, other than to prepare for formal vocational training. For example, a home economics teacher plans to incorporate much of the material from the course into a new home economics curriculum. Many women (and men) have taken the class to gain skills for personal use. They learn to understand, repair, or build things they use daily, while gaining a measure of self-sufficiency. After taking the class, women have tuned up their cars, relined brakes, repaired major appliances, tackled remodeling projects, and one woman built a chicken house. These are all projects they would not have attempted before taking Industrial Orientation. While these people may not be entering nontraditional jobs, they are nevertheless contributing to the changing attitudes about women's roles.

Industrial Orientation is being utilized in ways not envisioned when it was begun. For example, drafting students are enhancing their major program by taking the welding, machine shop, construction, and woodworking modules to better understand the function and operation of the projects they draw. Construction technology students without previous experience are taking the construction and other modules to quickly gain basic skills. One regular vocational instructor who also teaches an Industrial Orientation module has noted that students, especially women, who have come to his regular vocational classes from Industrial Orientation tend to drop out less often.

An informal follow-up survey of students from the first three sections of Industrial Orientation reveals that approximately 25% of women students in the program have selected, begun, or completed regular nontraditional training programs or classes. Others are completing math courses as prerequisites for electronics and other programs. Each term the enrollment for Industrial Orientation has increased. Also, each student is asked to evaluate each module after she or he completes it. These student evaluations have generally indicated that students feel the program is very worthwhile.

One visible sign of success is that the college, with vocational education money from the State Department of Education, has funded a full-time Project Director for the program. Another development is that the Center for Women's Opportunities of the American Association of Community and Junior Colleges in Washington, D.C., has identified Lane Community College as one of six colleges in the nation having exemplary programs for women. Carol Eliason, Director of the Center, said, "This is the only college that we've identified that has put together the relatiolnship that if you don't understand tool usage, if you don't know about these nontraditional occupational programs and what it means to work in those fields, then you're never going to sign up to take a course in it."

## PROGRAM FUTURE

Notwithstanding the apparent high cost of Industrial Orientation, the future of the program appears to be bright. The Director of Special Training, in anticipation of the day when state and federal vocational education funding may end, is currently trying to devise a way in which his department, other departments of vocational education, and the college's General Fund can pick up the salary of the Program Coordinator. As mentioned earlier, he hopes additional funds can be generated through grant and proposal writing.

The Coordinator has a number of specific plans for expanding and improving the Industrial Orientation program. Among these are the following:

- Establishing a Mechanical Skills Study Center, in which students can go to an area, at their convenience, to practice using a wide variety of wrenches, levels, calipers, power tools, and mechanical techniques with which they want familiarity.
- She would like additional resources to conduct more extensive follow-up surveys on Industrial Orientation students as well as surveys of employers to determine what their training needs are.
- She would like the flexibility to offer Industrial Orientation over the summer months so that students who complete the course could enroll directly in one of LCC's full-time vocational training programs which begin in the fall term.
- Although currently regular programs have priority for shop space, she feels the course could reach more women if it were offered in the morning when child care might not be such a critical problem.
- She wants to develop a funding source to offer a nontraditional career exploration class for men called Technical Service Orientation. This modularized class, which has already been approved by the college, would explore such areas as early childhood education, food service, nursing, medical and dental assisting, clerical, and other traditionally female occupations.

## REPLICATING THE PROGRAM

There do not appear to be any features of the Eugene, Oregon area that preclude a program similar to Industrial Orientation being established elsewhere. It could be done most easily within the structure of a community college or similar institution. The numerous facilities and support services provided by LCC represent a significant hurdle for any independent agency to attempt to duplicate.

A second important consideration is program staff and instructors, who must be aware of and sensitive to women's issues, and to male students who may feel they lack skills "Men should have." They must be unbiased role models for students. One teacher expressed his and other teachers' attitudes in this way (speaking of students): "There's nothing wrong that you don't knowwhat a crescent wrench is. Not knowing is not a fault....Instilling confidence is the biggest thing."

Other key features of the Industrial Orientation program that observers and participants feel are essential to the success of the program include:

- A strong network of specialized services for women. The Women's program serves both as a catalyst for services and a support system for women exploring nontraditional careers.
- Industrial Orientation is not exclusively a "women's" program. It is part of the college's mainstream programming, overseen by the Special Training Department of the Community Education Division.
- Interdepartmental cooperation and flexibility allows a program of this type to be integrated with existing programs and courses.
- The course itself is experientially oriented, emphasizing hands-on learning in a "you-cannot-fail" environment.

- A full time, "high energy" Program Coordinator.

One additional note An informative, step-by-step narrative history of the development of the Women's Program at LCC is available from Anne Stewart, Women's Program Coordinator, at the address below. The publication, *People Have Their Own Rooms,* is replete with anecdotes and strategies that may be of use to others trying to establish similar programs.

## CONTACT PERSON AND ADDRESS OF PROGRAM

Ms. Leslie Rasor
Associate Coordinator, Women's Programs
Lane Community College
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Eugene, Oregon 97405

# APPENDIX E

## INSERVICE WORKSHOPS FOR FACULTY

Sex equity workshops for faculty would be aimed at changing those behaviors that constitute barriers to sex equity. Length of training should be at least two days, which requires some commitment on the part of the trainees and provides sufficient time to absorb the material. The workshop schedule recommended below is made up of two parts: (1) an initial day and a half workshop to cover all the recommended topic areas and to identify practices that faculty would implement on a day-to-day basis; and (2) a half-day follow-up meeting approximately six weeks after the initial workshop.

All community college staff and administrators who have responsibility for providing vocational guidance and training should be encouraged to attend the workshop. All staff who provide services to students in programs traditional to one or the other sex should be required to attend the workshop.

The above activities should be combined into a program in such a way that the program is not confusing or monotonous. The following one-and-a-half-day schedule is suggested for the initial portion of the two-part workshop.

### *Schedule for Basic Inservice Workshop*

First Day

| | |
|---|---|
| 1:00-1:30 | Introduction and statement of purpose (Provost) |
| 1:30-2:30 | Overview: Sex equity in vocational programs; relationship between Title II and Title IX (OSDVE staff) |
| 2:30-2:45 | Break |
| 2:45-3:30 | Lecture or panel: Costs of bias and stereotyping (CC and/or OSDVE staff) |
| 3:30-4:30 | Small group session over wine and cheese: activity on sex bias and stereotyping |
| 4:30-5:00 | Summary reports from small groups; conclusion of business |

Second Day

| | |
|---|---|
| 9:00-10:00 | Small group session: Encounter group activity |
| 10:00-10:45 | Lecture or panel: How to identify sexist behavior (CC or OSDVE staff) |
| 10:45-11:00 | Break |
| 11:00-12:00 | Small group session: Activity on sex bias and stereotyping |
| 12:00-1:00 | Lunch |
| 1:00-2:00 | Lecture: Sex-fair behaviors and affirmative techniques for instructors and counselors (CC and/or OSDVE staff) |
| 2:00-2:15 | Break |
| 2:15-3:45 | Delbecq session: What can instructors and counselors do to recruit students into non-traditional programs |
| 3:45-4:15 | General session discussion on sex-fair behaviors and affirmative techniques; refreshments |
| 4:15-4:45 | Workshop summary and evaluation |

About six weeks later a follow-up session should be held for all who participated in the initial workshop. This would be a one-half day program to bring faculty together to review their own progress in implementing recruitment strategies and sex-fair/affirmative practices. We suggest the following schedule.

### *Follow-up Session*

| | |
|---|---|
| 1:00-1:30 | Introduction and statement of purpose (Provost) |
| 1:30-2:30 | Small group session: Discussion of problems/progress in implementing sex-fair/affirmative practices |
| 2:30-2:45 | Break |
| 2:45-3:15 | Report on small group sessions |
| 3:15-3:45 | Summary and conclusion of inservice training (CC and/or OSDVE staff); Refreshments |

# APPENDIX F

## CONTACTING BUSINESS AND COMMUNITY GROUPS*

### A. INITIAL TELEPHONE CONTACT

In most community groups, the President or the Program Director is the best person to contact because he or she can make decisions on which programs should be brought before the membership. You should try to obtain a face-to-face meeting with these decision-makers. Gear your telephone conversations towards that goal.

If, during your initial telephone contact, you speak to the Program Director or the President, outline the presentation to that person. If you do not reach the decision maker, obtain the name and number of that person and call him or her at a more convenient time.

Use the following format for this initial telephone contact. Start with a brief description of the school's interest in sex equity. You might say: *"This is Ms. Jones of the Central High School. We have a very interesting program that I think may be beneficial to your members because they have shown an interest in community development."* Make a direct reference to the interests of the group you are calling based upon the material in the previous section or other information you have obtained.

You could then say:

*"Our program is designed to create a greater awareness within the community of the benefits of fair hiring practices. Since many employers and active citizens are members of your organization, they might be interested in exploring some of the issues of equal employment. I'd like to meet with you to discuss it further."*

Don't provide too much or too little information about the program; say just enough to interest the individual so you can obtain an appointment to discuss it more thoroughly face-to-face.

At this point, one of three things may occur:

1. The contact may say "yes" to your request for a face-to-face meeting; if so, simply set a date for the meeting.
2. The contact may say *"no"*. If this happens, probe to uncover the reasons why he or she is rejecting your offer.
3. The contact may not say *"yes"* or *"no"*, but instead may ask you to send more information.

### Probing for Reasons Groups Reject Contact

While you do not want to alienate any community group, you surely do not want to accept rejection.

Your prospect may have a legitimate reason for rejecting your suggestion. The group may not give time to outside speakers, it may have a full program for the year, or the members may not be interested in equal employment. Also recognize that sex equity is a controversial issue; the person you have contacted may not want to discuss it.

While you may be tempted to explain the benefits of the program immediately when hearing a negative response, this should be avoided. If you mention benefits too quickly, you create a situation in which the contact might become defensive.

There is a better way to respond to a rejection—probe for hints or clues that

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*From Deanna Chitayat et al., *PROJECT SEISMIC: Sex Equity in Schools/Modules in Careers*, New York: Institute for Research and Development in Occupational Education, Center for Advanced Study in Education, Graduate School and University Center of the City University of New York, 1981.

may reveal the reason for it. Intelligently phrased probing questions may promote straightforward communication between you and the contact and ultimately provide an opportunity to mention the benefits of the program.

The following questions might be used (have these in front of you for quick reference as you call):

1. *"Is there a specific reason why you think your members might not be interested in this program?"*
2. *"What is it you think your members might not like about the ideas that we've discussed so far?"*
3. *"Is it that I haven't provided you with enough information; please let me know so I can explain our program more thoroughly."*
4. *"Is your program calendar filled for the coming year?"* (If this is answered affirmatively, try to get on the schedule for next year.)

Try to anticipate the possible reasons for rejection and how you can respond to them before making your telephone call. When responding, the best strategy is simple: be prepared.

Once you have probed and have a clearer idea why the program was rejected, try to overcome it. Tailor your description of the program benefits to the needs of the group and explain their advantages. For example:

- If the contact reveals the group's concern for community betterment, emphasize the positive effects of working with the school to equalize employment opportunity.
- If the contact reveals a commitment to youth, describe how the program helps children fulfill their potential.
- If the contact reveals a concern that members may be threatened by the equal rights movement, you might mention the responsibility of employers to comply with legislation they may not fully understand.
- If the contact reveals that the group publicizes its program heavily, inform him or her that sex equity programs generate positive publicity for business and community groups.

If, after describing several benefits, your contact is still not willing to set a date for a meeting but is still interested, suggest that you could send additional written information.

Many Presidents and Program Directors prefer to see something in writing, perhaps because it is more formal and perhaps because they can then discuss the program before their board.

Once the letter has been sent, follow it with a telephone call. Prepare yourself for the call, and handle it in the same manner as an initial call. If the contact rejects the program, refer, once again, to the probing questions.

You should send a letter-outline only when asked or when you have no other way to secure an appointment. In either case, the purpose of the letter is the same: it should help you to obtain a face-to-face appointment.

## B. LETTERS TO OUTLINE PROGRAM

**Following are three sample letter-outlines which you could send to an organization either after an initial telephone call or where further information has been requested. Use these as models for your letters.**

### Sample Letter-Outline #1

Central High School
North Ridge, New York 10209
October 5, 1987

Mr. Russ Christopher
President - North Ridge Jaycees
414 Dewey Street
North Ridge, NY 10209

Dear Mr. Christopher:

Thank you for the friendly reception you gave me when I called on Thursday.

The purpose of the program we discussed is to sensitize employers to the benefits of sex equity in employment by making them more aware of the legal, social, and statistical trends toward fairness in hiring. While the business community has surely done much to correct the inequities of the past in this area, a great deal still remains to be done. For this reason our school is reaching out to civic groups like yours.

Participation by members of the Jaycees in this program is likely to further improve your group's relations with our school and community and to serve as a tangible example of your interest in community improvement. Members of the Jaycees will become more aware of Federal Equal Employment Opportunity legislation and how they can comply with these regulations more effectively.

A variety of themes could be explored in the program, from brief summaries of employment legislation and statistics, to an interesting videotape on people in non-traditional jobs. The activities depend upon the nature of the audience, the time allotted, and the physical facilities available.

I would like to meet with you to show you our program materials and to discuss how we can pool our resources in this worthwhile community service. I will call you again in a week.

Sincerely,

Dorothy Bradley Rose
Director of Guidance
North Ridge High School

**Sample Letter-Outline #2**

Marathon Senior High School
Marathon, New York 11109
November 16, 1987

Ms. Marie Josephson
Program Director
Marathon Business and Professional
Women's Club
212 Empire Parkway
Marathon, NY 11109

Dear Ms. Josephson:

As you know, Federal and State regulations make discrimination in employment on the basis of sex illegal. While great progress has been made in business and industry to equalize hiring and employment practices, there is a great deal more still to be done.

The Marathon School District is offering a program on sex equity to civic groups and professional organizations so that the educational and business communities can help reduce sex bias in employment.

Our program could cover a variety of important topics: sex equity legislation, employment statistics, and the changing work roles of males and females. The presentation itself can be handled in many different ways; we can use videotape, group and individual activities, and brief lectures with discussion questions.

There is no cost to your organization and the presentation may be structured according to the interests and needs of your group so that your members will obtain maximum benefit from it.

I would like to meet with you to discuss the program further; at that time I can show you the materials which may be used, and we can decide jointly which materials would be most appropriate for your group.

I will call you soon to arrange a personal meeting to explore the program further. Please feel free to contact me at the school if you have any questions (555-0209).

Sincerely yours,

Peter D. Thornton
Department of Social Studies
Marathon Senior High School

## Sample Letter-Outline # (Tailored to Community Group)

Cedar Heights Public Schools
Cedar Heights, New York 14762
April 18, 1987

Mr. David P. Kelly
President - Cedar Heights Rotary Club
158 Chestnut Street
Cedar Heights, NY 14762

Dear Mr. Kelly:

As you and your members are certainly aware, Federal and State legislation has made sex discrimination in employment illegal. And, although great strides have been made by business and industry to attain equality in hiring and employment, there is much more which can be accomplished.

Because the Rotary club encourages the ideals of high ethical conduct in business and professional activities, your members may be interested in a program on sex equity sponsored by the Cedar Heights High School.

The program can be designed by you or another Rotary representative working together with an educator from our school system, demonstrating the close interaction of the Rotary Club with local education. The program could be designed to cover several important topics: sex discrimination legislation, employment statistics, and the changing work roles of males and females. The form of presentation is diverse; we can use videotape, group and individual activities, and discussion questions during the program. Your program should be structured with the business and professional interests of your group in mind so that your members obtain the maximum benefit from it.

I will call you soon to arrange a meeting to explore the presentation in further detail. Please feel free to call me at the school if you have any questions (555-1116).

Very truly yours,

Donna Stevens Cobb
Affirmative Action Coordinator
Cedar Heights Public Schools

## C. FOLLOW-UP TELEPHONE CONTACT

Within a week of sending your letter-outline, follow it with a telephone call. Remember, your primary objective is to obtain an appointment with your contact.

During this telephone call you can probe for further information. You might ask:

- *"How do you feel about the program?"*
- *"Has your group ever attended such a program?"*
- *"What ideas do you have that could be incorporated in this program?"*
- *"When can we get together to discuss it further?"*

In spite of your efforts, the contact may still raise objections about the program. The next section will help you handle these objections.

### Handling Objections

An objection is any reason the contact may have for delaying or not wanting to arrange the program. Generally, objections can be handled by:

1. providing the contact with further information about the program;
2. reassuring the contact that the civic group can benefit from the program;
3. helping alleviate any concerns the contact may have about the program.

Whether you handle these objections during a phone call or in a face-to-face visit, you must be able to handle them adroitly.

Following are several examples of objections you may hear and suggested approaches for handling each one.

**OBJECTION:** *"We have a full program schedule this year."*

**POSSIBLE RESPONSES:** *"What other programs are scheduled?"* (Probe for more information to try to overcome this objection.)

*"Our presentation can be adjusted to varying time lengths. A short program may be best for you."*

*"What are the possibilities of doing it early next year?"*

**OBJECTION:** *"We've never done that before."*

**POSSIBLE RESPONSE:** *"What kind of presentations do you usually have?"* (Probe for more information.) *"Are your members aware of the changing Federal and state regulations?"*

**OBJECTION:** *"We have no interest in that type of program."*

**POSSIBLE RESPONSES:** *"What is the purpose of your community group?"*

*"What kind of members belong to the _______ and what are their interests?"* (Keep in mind that you should be looking for a way to tie the contact's response to the program.)

For example, the contact may respond by saying, *"Our group consists of businesspeople from the community who work closely to help our children grow and develop."*

You could then respond: *"Wouldn't it also be in the interests of the ______ to help its members know more about the issues of equal employment?"*

**OBJECTION:** *"We tried something like that a few years ago and it didn't go over too well."*

**POSSIBLE RESPONSES:** *"Oh really? What were some of the problems you had?"*

Suppose the contact responds in either of these ways:

*"Well, the speaker talked for forty minutes and no one was really interested,"* or, *"that didn't apply to our group."*

At this point, you could say:

*"That's one of the reasons why I want to get together with you so that we can plan the program jointly. We have many options; together we can pick those that you feel are most appropriate to the needs of your members"*, or, *"our program is not lecture oriented. It contains many activities that will allow members to discuss interesting issues."*

**OBJECTION:** *"We had a speaker from a Woman's group a while back and the audience objected to her activist remarks."*

**POSSIBLE RESPONSES:** *"Do you know why the audience objected to the speaker?"*

*"Did the audience react unfavorably to her attitude or to what she had to say?"* Try to probe for the reasons underlying the group's disapproval. Encourage the contact to give you information that:

1. tells you what *not* to emphasize, and
2. allows you to stress the flexibility of your program and your desire to gain the contact's assistance in preparing the agenda.

You might use his or her comments to your benefit by saying:

*"Our presentation will be custom designed to fit your members' needs."*

*"We have several activities we can include; most groups find these activities lots of fun. That's why I want to meet with you to select the program components."*

*"You'll see this program before we do anything with your group; you can help create the program so that it's right for your people."*

### Recommending Benefits

After you have handled your contact's objections satisfactorily, recommend benefits the program can bring to both the community group and its members.

The community group may realize the following benefits:

1. improved relations with school and community.
2. favorable publicity associated with affirmative action programs.

The group members may realize these benefits:

1. greater awareness of people available for employment in nontraditional jobs;

2. increased knowledge of state and Federal equal employment and affirmative action regulations;
3. greater ability to establish affirmative action plans;
4. improved morale and productivity when employees have greater responsibility in their jobs;
5. reduced employee turnover when jobs and promotions are based on merit.

## D. FACE-TO-FACE PLANNING MEETING

When you meet your contact face-to-face, your purpose is to obtain approval for the program and to schedule a date for it. Prepare yourself for this meeting. Take this guide with you so you can show, discuss, and decide on the various presentations and activities that the contact feels will be most useful. (See Segment 4: Selecting Program Components.)

At the beginning of your meeting, ask your contact to describe the role and functions of the group; this will help demonstrate your sincere interest and will enable you to recommend an appropriate agenda.

Ask the contact for information. Try to find out: the size of the group; the type of meeting facilities; the meeting time; and the general characteristics of the membership. Only after you have obtained a clear picture of the group should you begin to make preliminary program recommendations.

In Segment 4 of this guide, you will find sample presentations, handouts, and activities that can be used in the program. Show these materials to your contact so that he/she can assist in selecting the best items for the audience. Involving the contact in this way is an excellent approach since he/she assumes greater responsibility for successful implementation of the program.

During this face-to-face meeting, be sure to set a date and a time for the program and to complete any other necessary planning.

## APPENDIX G

## MEDIA CAMPAIGN

Images of females and males in nontraditional skilled and craft careers and vocational programs must become acceptable—and familiar—to the community at large. One indispensable means for achieving this objective is a statewide publicity campaign utilizing print and electronic media—magazines, newspapers, newsletters, radio, and television. Without such publicity, an unaware public cannot be enlightened.

A press conference could be called to kick off the concept of females and males in nontraditional programs in community colleges. Letters would be sent to state and local newspapers, appropriate organization newsletters, magazines, and to radio and TV stations, briefly explaining the Sex Equity Plan and inviting addressees to attend the press conference and meet students already enrolled in such programs, and also to meet nontraditional employees and employers from various communities in the islands.

The press conference could be held in a vocational classroom at one of the community colleges. News releases would be distributed. Media guests may have a chance to interview and photograph nontraditional participants.

As a result of the press conference, a network of media connections would be established which may prove significant throughout implementation of the sex equity plan. Thank-you letters may be sent to conference participants, and news releases to others.

In response to media coverage, a telephone number should be designated for receiving of comments, requests for additional information, invitations for SEC personnel to appear in secondary schools and elsewhere, and so on.

In order to continue the publicity campaign, public service announcements (PSAs) might be developed for use on radio and TV. Permission might be obtained from companies hiring nontraditional workers to photograph them at work. The essential message would be that vocational education in all fields is available to females (and correspondingly that males are also enrolling in such programs as nursing, as well as in the homemaking fields which enhance personal life). Again, a telephone number should be available for questions. If possible, PSAs should be timed for early in the year when high school seniors might be reflecting on autumn plans, and when students might be thinking about registration for fall courses. Prospective students beyond high school age should also be reached by PSA announcements.

Half-hour talk shows or "documentaries" might also be considered.

*PBS Television*

Two videotape projects have been completed (HCC, 1978 and Kauai CC, 1980). These might be edited for scheduling on PBS television. Consultation should first be made with Channel 11 program manager Charles Stubblefield, since there are FCC specifications and other guidelines for appropriate media journalism.

As for "spot copy"—10-15 or 30-second announcements—if these are merely verbal statements, then it is a rather simple procedure to have them presented. For a video action spot, one can again shoot the film oneself and hope to get it aired, or, if sponsored by a State agency, the station may be able to produce it.

*Commercial Television*

Anything which is made by outsiders or by the station must have a sponsor, since the bottom line is profitability. However, since the FCC requires stations to allot specific slots of time for public service programming, it would be possible to organize a program for one of these slots. (These are generally panel discussions at off hours.) SEC members and nontraditional students, employees and employers could participate.

A press conference should hopefully yield a spot on local news telecasts.

Stations are generally willing to cooperate with those wishing to frame a 10-to-30 second PSA, using video or slides. More specific information may be had from the Public Service Directors of TV stations. In Honolulu these are:

Channel 9: Jim Doney, 944-5200
Channel 4: Bob Turner, 537-3991
Channel 2: Jack Kellner, 531-8585
Channel 13: Sandy Carillo, 847-1178

The following is a partial list of national and local programs with a public service orientation. For the national shows, it should be ascertained whether sex equity programs have been filmed elsewhere in the past, and if so, request local stations to air those programs; for local programs, one could propose one's own program utilizing SEC and community personnel.

| *Channel* | *Title* | *Airing Time* |
|---|---|---|
| 2-7-11 | Public Affairs | Sunday 6 a.m. |
| 4-12-13 | Directions | Sunday 9 a.m |
| 4-12-13 | Conversation | Sunday 10:30 a.m. |
| 4-12-13 | Issues and Answers | Sunday 11:30 a.m. |
| 9-3-9 | Perspective '81 | Sunday 2:30 p.m. |
| 13 | Public Policy Forum | Sunday 4 p.m. |
| 11-10-4 | Rice and Roses | Sunday 5 p.m. |
| 13 | Human Dimension | Sunday 5 p.m. |
| 11-10-4 | Superintendent's Report | Sunday 6 p.m. |
| 11-10-4 | Dialogue | Thursday 8 p.m. |
| 11-10-4 | Samoa I Hawaii | Thursday 10 p.m. |

*Radio*

Public announcements on local stations, particularly those serving student generations, should be arranged. Contacting specific stations for requirements and logistical information would be appropriate. Hawaiian, Samoan, Ilocano, Korean, and Japanese broadcasts should be included, since the publicity and the sex equity project are aiming for inclusive coverage and participation.

*Periodicals: Newspapers, Magazines, Newsletters*

Here is a partial list of periodical publishers to be invited to the press conference to receive news releases: *Hawaii Business, Building Industry Digest, Management Bulletin Hawaii, Pacific Business News, Honolulu Advertiser, Star Bulletin, Maui News, Garden Island, Hawaii Tribune Herald,Hawaii Filipino News, Molokai Free Press, United Chinese Press, Korean Central Daily News.* In addition, YWCA, NOW and other newsletters; organizations serving women, including the Kalihi Palama Immigrant Services Center which refers people to community colleges; and high school and community college newspapers should be included. Potential students, employers, and employees should all be reached by an extensive campaign.

Emphasis on a local and grassroots character of the sex equity plan—from the people up and not vice versa—ought to be developed and cultivated. Media coverage should be solicited for any newsworthy event connected with the implementation of the sex equity plan, including announcements of special courses, special achievements of non-traditional students and employees, job fairs, etc. Coordination with the Public Relations Assistant in the University Relations Office is recommended for the implementation of this activity.

# APPENDIX H

# PROCEDURES FOR FORMING A SUPPORT GROUP FOR NONTRADITIONAL STUDENTS

(to counteract peer pressure and encourage peer support)

1. Obtain a list of names and mailing addresses of nontraditional female and male students from appropriate departments. Send out fliers indicating awareness that their situation might at times be problematic and at times potentially inspiring to others and suggesting that contact with other similarly situated students might benefit everyone. Ask if they would like to meet to plan an initial social get-together, with other supportive meetings or activities to follow if there is an interest. Name a date, time, and place for such an initial planning session. (The more students are themselves involved in making their own structures, the more meaningful it is likely to be.) If visible or outspoken "leaders" are known, it would be particularly appropriate to contact them.

2. In the plenary session, find out what interest, questions, concerns, problems and ideas students have. How do they view themselves and their classmates (both traditional and nontraditional)? How do they view the backgrounds they have come from? Are they predominately rugged individualists who disdain the thought of being treated as special cases? Are they proud of being pioneers or leaders? Do they feel besieged by negative conflict at home or in the classroom, or within themselves? Do those who show up for the plenary session represent the stances of nontraditional students as a whole? Is there support for the idea of an ongoing group support system?

3. Evolving out of the above, a social get-together for all nontraditional students might be created and announced by funky, artistic invitations mailed personally. It could be a breakfast or luncheon picnic, a celebration of change, the calling together of a team for the games and struggles ahead.

Perhaps a balanced and inspiring film or slide show could be found as focus for the different individualities in the group—something pointing out the changing times of which they are a significant part and providing a sense of historical context for their individual and collective choices.

A group of students could lead a discussion calling for ideas about maintaining some group cohesion—an Alliance/Association of Nontraditional Space-Age Students, for example—featuring brownbag programs from time to time, setting up a network of rap groups and peer counseling if desired, and running a column in the school paper (or sponsoring other forums in which their campus and community leadership potential might develop—high school workshops and assemblies, union meetings, PBS programs, etc.). Again, form and substance would have to come from the students themselves, assisted and facilitated by staff people.

(Of course it is possible that those students most needing a support system would be the least likely to speak up and let it be known. It would be important to be in touch with such undercurrents.)

4. In such a group meeting/social gathering, a poll of student interests and concerns might be taken, including topics they might like to know more about (laws, jobs, statistics about employment, salaries, etc.), things they might like to do (role playing, peer counseling), problems/fears/strengths they might like to share, and so on.

# APPENDIX J

## PROGRAM CLASSIFICATION

*Mixed Program:* Program in which women or men students comprise 25.1 to 75.0 percent of all enrolled students. (National Advisory Council on Vocational Education, *Increasing Sex Equity, the Impact of the 1976 Vocational Education Amendments on Sex Equity in Vocational Education,* Washington: Govt. Print. Off., 1981.) These are:

- Trades and Industry
  - commercial arts
- Distributive
  - commercial baking
  - food service
  - food service—culinary art
  - food service—dining room
  - food service management
- Health
  - radiologic technology
  - respiratory therapy
- Business
  - accounting and related
  - data processing
  - data processing operation
  - finance: finance
  - sales and management
  - hotel operation
  - merchandising
- Technical
  - date processing: information and computer science
- Other
  - legal assistant
  - library technology
  - recreation instructor
  - social justice
  - human services

*Nontraditional Program for Men:* Program in which men students enrolled comprise 0.0 to 25.0 percent of all enrolled students; a traditional program for women. (Ibid.) These are:

- Trades and Industry
  - apparel trades: apparel design
  - fashion design and merchandising
  - cosmetology
- Health
  - associate degree nursing
  - dietetic technology
  - dental assisting
  - medical assisting
  - medical lab technology
  - occupational therapy assisting
  - practical nursing
- Business
  - business operations
  - clerical bookkeeping

- clerical general
- clerical stenography
- clerical typist
- general business
- general office training
- secretarial science

*Nontraditional Program for Women:* Program in which enrolled women students comprise 0.0 to 25.0 percent of all enrolled students; a traditional program for men. (Ibid.) These are:

- Trades and Industry
  - occupational safety and health
  - applied trades
  - graphic art
  - automotive technology: autobody
  - automechanic technology
  - carpentry
  - electricity
  - industrial electricity
  - diesel mechanic
  - heavy equipment maintenance
  - drafting technology—architectural drafting
  - draft and engineering aide
  - drafting technology
  - metal working: machine shop
  - sheet metal and plastic
  - welding and sheet metal
  - welding technology
  - marine pipefitter
  - refrigeration technology
- Agriculture
  - agriculture (2 year)
- Technical
  - fire science
  - industrial education
  - police science
  - aeronautics technology
  - electronics
  - engineering technology
  - maintenance technology
  - marine technology

Office of the State Director for Vocational Education

## APPENDIX J

# SEX EQUITY PILOT PROJECTS IN COMMUNITY COLLEGES

University of Hawaii, March 1981

## BRIEF BACKGROUND

The Education Amendments of 1976 relating to vocational education (Title II) mandate that a minimum of $50,000 of the basic federal grant to each state be expended to achieve sex equity in vocational education programs. The 1976 Amendments additionally stipulate that the funds must be used to support a full-time staff member to oversee and initiate a variety of federally specified activities directed towards eliminating sex bias, stereotyping, and discrimination.

To meet these requirements, the Office of the State Director for Vocational Education (OSDVE) has allocated these funds not only for personnel and other administrative costs but also for: (1) pilot projects in the community colleges within the University of Hawaii system; and (2) annual work sessions for high school administrators, teachers and counselors within the Department of Education.

This report covers only those projects in the community colleges.

## PROJECT SELECTION PROCESS

Funds for pilot projects are awarded on a competitive basis. Normally, twice during the academic year, all community colleges are given the opportunity to submit project proposals. A committee of representatives from OSDVE and the Office of the Chancellor for Community Colleges reviews these proposals and submits its recommendation to OSDVE for approval.

## OVERVIEW OF PROJECTS

The first funding cycle for sex equity pilot projects began in 1978. Since then, a total of 13 projects have received project awards as follows:

| College | No. of Projects | Aggregate Project Award |
|---|---|---|
| Hawaii | 2 | $ 2,531 |
| Honolulu | 1 | 10,000 |
| Kapiolani | 4 | 6,327 |
| Kauai | 1 | 1,542 |
| Maui | 3 | 10,075 |
| Windward | 2 | 3,631 |
| Totals: | 13 | $34,106 |

Although these projects differed in their activities and duration, their basic purpose was to promote an educational and supportive environment which would enable students to explore and successfully pursue non-traditional occupations. An abbreviated description of each project is attached.

It should be noted that several of the projects were actually components or phases of a single project concept. However, since separate proposals were required for these components and since these proposals were subjected to competitive review in a new funding cycle, they have been listed as separate projects. Thus, for example, the 4 projects at Kapiolani Community College are reducible to 2 major projects each with 2 components.

It should be further noted that with a few exceptions, actual project expenditures did not exceed the initial project award. The total of $34,106 is thus a fair estimate of the amount expended, and encumbered as in the case of awards made this year. Several of the projects were also supported with funds totaling approximately $550 from Project Equity, University of Hawaii. These are indicated in the attached listing wherever applicable.

PROJECT ACTIVITIES/OUTCOMES/PRODUCTS

The pilot projects addressed a variety of perceived as well as documented needs. These ranged from improving student access and transition towards non-traditional careers to sensitizing faculty to sex role stereotyping. Similarly, the activities varied among the colleges. These included workshops, needs assessment and attitudinal survey as well as the introduction of a new course in personal and career development. While the primary target groups were faculty and college students, a few projects were devoted to creating better awareness among high school students.

Specific products which these projects generated were: sex-fair brochures on vocational education programs; video-tapes on sex equity issues and non-traditional occupations; and a resource directory of non-traditional workers.

Since evaluation instruments varied from project to project and, in a few instances were not used at all, it is difficult to assess the overall outcome of these efforts. However, those projects which did conduct evaluations indicated positive results. Viewed from a broader perspective, i.e. one that acknowledges the cumulative effect on a longer time frame, these individual pilot projects have all contributed to furthering sex equity on their respective campuses and establishing a base on which to build.

RESPONSE TO ON-GOING NEEDS

In efforts to strengthen the base established thus far, OSDVE has recently contracted the Industrial Relations Center (IRC), University of Hawaii to conduct a systemwide sex equity project. Unlike the other college projects, the IRC project is funded through monies from Subpart III (Program Improvement), Title II. In close cooperation with OSDVE and the Office of the Chancellor for Community Colleges, the project will provide research as well as facilitate the development of a cohesive systemwide, and perhaps sequential, plan of action to promote sex equity.

Initial project activities include the establishment of (1) a research unit; (2) sex equity campus-based committees in each college, composed of a cross-section college personnel; and (3) a systemwide planning committee. Through linkages among each of the above 3 components, the project will closely examine issues in sex-role stereotyping and biases. In addition, it will develop systemwide as well as campus strategies which could be implemented to effectively minimize these factors. It will also incorporate in its plan development, mechanisms for information exchange within the system and appropriate instruments to evaluate activities. The project, with an expected completion date of September 1981, represents a major effort towards addressing current needs in sex equity.

Office of the State Director for Vocational Education

## POST-SECONDARY SEX EQUITY PROJECTS FUNDED THROUGH THE OFFICE OF THE STATE DIRECTOR FOR VOCATIONAL EDUCATION

Part I - Past Projects (FY 1978 - 1980)

| Unit and/or College | Project Title | Principal Investigator(s) | Description: Project Period Objectives/Activities/Products | *Project Award |
|---|---|---|---|---|
| Honolulu Community College | Pilot Project to Reduce Sex Stereotyping in Vocational Education | Meda Chesney-Lind<br>Associate: David Cleveland | **Project Period:** 1/78 - 10/78<br>**Objectives:**<br>(1) Construct profile of sex segregation on HCC Voc. Ed. programs<br>(2) Sensitize faculty to sex role stereotyping.<br>(3) Measure change in targeted voc. ed. programs.<br>**Activities (sequential)/Products:**<br>(1) Trained socio. students to conduct surveys and interviews.<br>(2) Held open house for high school students and conducted survey of attitudes on sex equity at one high school.<br>(3) Established baseline data.<br>(4) Conducted 3 workshops for students/faculty to facilitate attitudinal changes.<br>(5) Produced 5 video tapes on the workshop series; major issues; and non-traditional students.<br>(6) Documented all activities (methodology, data and resource materials) in 2 vol. Final Report. | $10,000 |
| Kapiolani Community College | Elimination of Sex Bias in Vocational Education Programs at Kapiolani CC | Sharon Narimatsu | **Project Period:** 2/79 - 6/79<br>**Objectives:**<br>(1) To eliminate sex bias in Voc. Ed. Programs at Kapiolani Community College.<br>**Activities/Products:**<br>(1) Planned appropriate activities and explored policies which address sex bias.<br>(2) Completed a *Report on the Research and Planning for the Elimination of Sex Bias in Vocational Education at Kapiolani Community College* | $ 1,500 |
| Kapiolani Community College | Elimination of Sex Bias in Vocational Education Programs at Kapiolani CC | Sharon Narimatsu | **Project Period:** 9/79 - 12/79<br>**Objectives/Activities/Products:**<br>(1) Conducted 3 workshops on sex bias and ways to overcome this for students, faculty and administrators.<br>(2) Introduced a new course, *Personal and Career Development.*<br>(3) Reported on child-care needs and available facilities. | $ 1,650 |

*Unless specified, all grant awards are funded by Subpart II monies of Title II, Vocational Education Amendments. Also, unless specified the $ amounts reflect grant award totals rather than actual expenditures which, depending on the project may have been more or less than the grant award.

| Unit and/or College | Project Title | Principal Investigator(s) | Description: Project Period Objectives/Activities/Products | Project Award |
|---|---|---|---|---|
| Kapiolani Community College | Achieving Sex Equity in Vocational Education Programs at Kapiolani Community College | Darrilynn Kam | **Project Period:** 1/80 - 8/80<br>**Objectives:**<br>(1) Increase student awareness.<br>(2) Encourage exploration of non-traditional careers.<br>**Activities/Products:**<br>(1) Sex Equity presentations to guidance classes in 5 high schools.<br>(2) Printing of Directory of Non-Traditional Workers in Hawaii.<br>(3) Completion of 4 photographic collapsible blocks on Voc. Ed. Programs. Stored at KCC for use elsewhere to attract students to explore non traditional careers | $1,445.54 (actual expenditure) |
| Windward Community College | Reduction of Sex Stereotyping | Janice Nuckols | **Project Period:** 9/79 - 12/79<br>**Objectives:**<br>(1) Conduct literature review and analysis of vocational education materials used at WCC.<br>(2) Develop guidelines/plans/materials for eliminating sex role stereotyping.<br>**Activities/Products:**<br>(1) Developed a two-year plan to create support for men and women in non-traditional courses.<br>(2) Developed guidelines for instructional use of materials.<br>(3) Analyzed curriculum materials and conducted seminars on the subject with WCC faculty and staff. | $ 1,798 |
| Windward Community College | Promoting Non Sex-Stereotyped Vocational Education | Janice Nuckols | **Project Period:** 1/80 - 6/80<br>**Objectives/Activities:**<br>(1) To plan activities to reduce or eliminate current sex stereotyping in vocational education programs; e.g. 1 day faculty workshop, radio spots and newspaper articles, luncheons for high school counselors, distribution of pamphlets and career exploration folders. | $ 1,833 |
| Hawaii Community College | Reducing Sex-Role Stereotyping in Vocational Education | | **Project Period:** 2/79 - 6/79<br>**Objectives:**<br>(1) To reduce sex-stereotyping on part of students as they select vocational training.<br>**Products:**<br>(1) Produced 25,000 brochures on 8 voc. ed. programs with emphasis on enrolling women. Distributed these to all community colleges for use in career opportunities workshops and related activities. | $ 1,606 |
| Maui Community College | Eliminating Sex Stereotyping in Vocational Education | Don Ainsworth | **Project Period:** 2/79 - 6/79<br>**Objectives/Activities:**<br>Conduct 11 workshops to: (1) encourage enrollment in non-traditional voc. ed. programs, (2) expand community awareness of programs at MCC, (3) identify and use non-traditional workers as presentors and role models. | $ 2,000 |

| Unit and/or College | Project Title | Principal Investigator(s) | Description: Project Period Objectives/Activities/Products | Project Award |
|---|---|---|---|---|
| Maui Community College | Exploration: Opportunities to Experience Formerly Sex-Limited Occupations | Gail Bartholomew<br>Jane Fletcher<br>George Seriguchi | **Project Period:** 2/80 - 6/80<br>**Objectives/Activities:**<br>Same as above.<br>Final Report outlines the results of these 2 projects at MCC. | $ 2,000 |
| Kauai Community College | Reduce Sex Bias and Stereotyping in Vocational Education Through Media | LeRoy King<br>Guy Fujiuchi<br>Barbara Daly | **Project Period:** 2/80 - 12/80<br>Project extended to February 1981.<br>**Objectives:**<br>(1) To acquaint students with non-traditional voc. ed. training and careers.<br>(2) To reinforce students and promote peer support to non-traditional voc. ed. students.<br>(3) To increase student awareness of sex bias attitudes among employers and how they may be constructively handled.<br>**Expected Products:**<br>(1) 20-minute video tape film on sex bias/stereotyping.<br>(2) Brochures on secretarial science, accounting and nursing programs. | $ 1,442 |

**Part II - Current Projects (FY 1980-81)**

| Unit and/or College | Project Title | Principal Investigator(s) | Description: Project Period Objectives/Activities/Products | Project Award |
|---|---|---|---|---|
| Hawaii Community College | Non-Traditional Opportunities in Vocational Education | Mitsugu Sumada | **Project Period:** 2/81 - 6/81<br>**Objectives:**<br>(1) Increase awareness and participation of students and prospective students in non-traditional programs.<br>(2) Increase awareness in community of non-traditional options.<br>(3) Increase cooperation/contact with community agencies involved in non-traditional programming (YWCA, CETA, etc.).<br>**Expected Outcomes/Products:**<br>(1) Brochures/flyers/bookmarks will be printed for wide distribution.<br>(2) Workshops/seminars will be conducted utilizing successful non-traditional role models. | $ 925<br>$400 from Project |

| Unit and/or College | Project Title | Principal Investigator(s) | Description: Project Period Objectives/Activities/Products | Project Award |
|---|---|---|---|---|
| **Maui Community College** | **Transition of Careers** | **Jane Fletcher and Mark Slattery** | **Project Period: 2/81 - 9/81**<br>**Objectives:**<br>(1) Determine employment opportunities on Maui for non-traditional occupations.<br>(2) Increase awareness of non-traditional job opportunities and related training.<br>(3) Conduct workshops to develop pre-requisite competencies.<br>(4) Build collaborative relationships between Maui employers and MCC to identify/prepare/train persons interested in non-traditional occupations.<br>**Expected Outcomes:**<br>(1) Increased community awareness on availability of non-traditional careers and training.<br>(2) Provision of training to up-grade skills and pre-requisite competencies.<br>(3) Development of future strategies to improve sex equity in single-sex dominated program. | **$ 6,075** |
| **Kapiolani Community College** | **A Sequel to Achieving Sex Equity in Vocational Education Programs at Kapiolani Community College** | **Darrilynn Kam** | **Project Period: 9/80 - 6/81**<br>**Objectives:**<br>(1) Increase student awareness.<br>(2) Encourage exploration of non-traditional careers.<br>**Activities/Expected Products:**<br>(1) Expand the Directory of Non Traditional Workers in Hawaii.<br>(2) Continue to schedule non traditional workers to speak at high schools. | **$ 1,732**<br>**Up to $150 from Project Equity** |
| **Industrial Relations Center, UH/Manoa** | **Preparing a Viable Plan of Action to Overcome Covert and Overt Sex Bias, Stereotyping and Discrimination in Post Secondary Schools** | **Joyce Najita and Carol Odo** | **Project Period: 3/81 - 9/81**<br>**Objectives/Expected Outcomes:**<br>*Phase I:* Establish plan development system, e.g., committees, linkages, research/technical unit.<br>*Phase II:* Determine objectives for the proposed systemwide plan; and its needs assessment/evaluation methods and strategies to address needs.<br>*Phase III:* Identify elements for an integrated approach to developing a systemwide plan which is adaptable to campuses and enables coordinated/effective implementation of equity projects among CC's. | **$12,000**<br>**Subpart III** |

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